Spectr. Temp

Focus .....

Spectr. Temp

Exp. Mtr.	S

pectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions .....

ocus .....

pectr. Temp. ..... Dome Temp./Hum. .....

xp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
					DAVID DUNLAP OBSERVATORY						
					74" LOGBOOK						
					VOL 59						
					PLATE NOS. 48713 - 24428						
					NOV 1984 - OCT 1985						

5 Cont from last Book

Date Nov. 13-14/84 Observers KBT-JM

Emulsion Batches:
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.....
.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
	HD 24760	03 51.1	+39 43	03 05	3 15	R 37 W	+	FeNe Clear	3s
	HD 46150	06 26.6	+5 00	03 30	5 24	W	+4 59	"	33
	HD24760	03 51.1	+3943	05 33	5 56	W	+	"	3-3
	"	"	"	05 59	6 08	5 30W	"	"	3 Hy
	Flat Fld					0 0	"	Tung Clear	15 min

Spectr. Te
Focus ...
Spectr. Te

Exp. Mtr.

4/146
40/104
4/88
4/33

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions ... Fine ... Co..

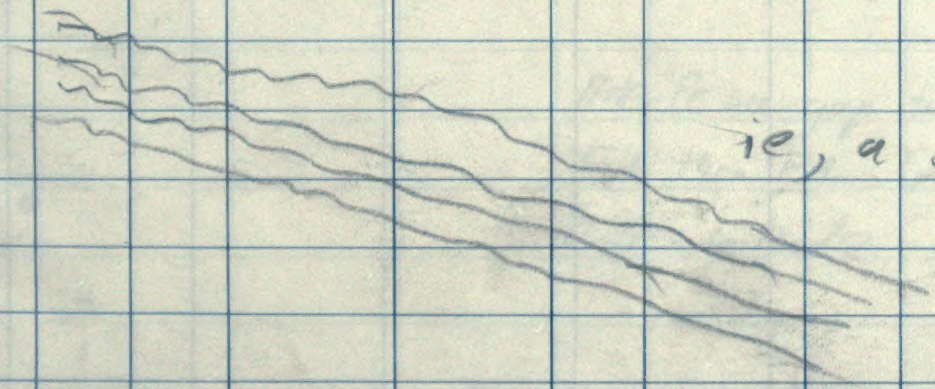
Focus .....

Spectr. Temp. ..... Dome Temp./Hum. +27.7/H=58%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
4/146	3"	2.71	B07III	BC	1800/430	250μ/3	Reticon		E Pers prog		
40/104	3"	6.86	O6fV	"	"	"	"		mk std	Fld drawn (looks OK)	
4/88	4"	2.71	B07III	"	"	"	"		E Pers	(1st comp labelled same as for last star (saturated)	
4/33	"	"	"	"	"	"	"		"	Fine	
				"	"	"	"				

Note why was this exp saturated & the others were not?

Last Flat Fld looked like following



ie, a slope, but straight.

normal Planck distribution

Comparison Type/Filter	Ex
Fe/Ne clear	3"
"	33
"	33
"	33
Tung clear	Krin

7

Date Nov 14-15/84 Wed-Thurs Observers Bt-Ty

8" 68° Emulsion Batches: IIaO-E 19103-05114

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48713	HD 217312	22 54.8	+62 32	17 40	19 59	0 21W	+63 03	Fe/—	8-8-8
48713	Spot Calc for 48713-14.			15 min @ 15U		D4 D3 3900 4300	D2 4810		
48714	HD 19058	2 58.8	+38 27	20 03	21 03	2 40E	+38 47	Fe/—	8-8
48714F1	Focus test	} PHA vs B				0	≈+15°	"	20-20
48714F2	" "					0	"	"	20-20
48714F3	" "	} A vs B				0	"	"	"
48714F4	" "					0	"	"	"
48714F5	" "	} A vs B				0	"	"	"
48714F6	" "					0	"	"	"

Spectr. Temp. 40°f Dome Temp./Hum. +40°/60% Transparency Conditions clouding in

Focus 513

Spectr. Temp. 40.5°f Dome Temp./Hum. 37°F/60%

Comparison Type/Filter	Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/–	8-8	40/147	1"	7.2	BO IV +BO IV	BC	1200/50.7	BS	IIaO-E	A	Ly prog	* Some uncertainty in comp exp.	Fine
									"				
Fe/–	8-8	40/170	1"	5.04	M+II-III	BC	1200/50.7	BS..	"..	B	Py prog	some cloud	Fine
"	20-20				–	"	"	"	"	A	Set 513	Label is "14" only	cent Red
"	20-20					"	"	"	"	B	Set 513	"14" F2	right on
"	"		40.5°f			"	"	"	"	A	Set 509	"F3"	cent sl blue
"	"					"	"	"	"	B	" 509	"F4"	center blue
"	"					"	"	"	"	B	"	"F5"	cent blue
"	"					"	"	"	"	A	"	"F6"	cent blue

Note, Fe arc gap too wide, but close to center for F1 thru F4. Gap narrowed by moving North electrode South for F5 & F6

9

Drd = Dan Reid

Date Nov. 17-18/84 Sat-Sun Observers Tn - Drd

Emulsion Batches:
IIIaJ-E 31083 - 07114
IIaO-E 19103 - 15114

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
48715	HD 209790	22 009	+64 08	17 50	18 40	00 08W	+64 37	Fe/-	6-18-	26/170
48715T	Spot Calib for	48715-16		15 minutes	17.5V 18 D4 3900	15V 15 4300	15V 4810			
48716	HD 21699	03 25.1	+47 41	18 58	20 58	0307E	+48 00	Fe/-	6-16-1	20/173
48717	HD 1337	00 12.4	+50 53	21 02	21 17	01 25 X W	+51 22	"	8-8	40/19
48717F	Focus test					" X Tn	"	"	20-2	

= 07/14
= 15/14

Spectr. Temp. +38°F Dome Temp./Hum. +35°F/60% Transparency Conditions part cloudy 10

Focus 512

Spectr. Temp. 37.5°F Dome Temp./Hum. 30°F/70%

Comparison Type/Filter	Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/-	6-18	20/170	2"-3"	4.63	A3m	BC	1200/5000Å	BS	IIIaJ-E	A	Asm Sp		fine
									IIIaJ-E				
Fe/-	6-16	20/173	3"-5"	5.36	B/IIIp	BC	1200/5000Å	BS	IIIaJ-E	A	He rich-bk	some cloud	fe sl wk V sl wk
"	8-8	40/19	3"	6.08	O9III	"	"	"	IIaO-E	B	Ly proj	" " Set 513	wk
"	21-2					"	"	"	IIaO	A		37.5°F Set 513	sl red
			I kept this anyway, even though prob very wk.										

11

Emulsion Batches: 8"68 IIaO-E 19103 -15114

Date Nov. 18-19/84 Sat.-Sun. Observers B.-T.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48718	HD19058	02 58.8	+38 27	20 16	20 41	2 47E	+38 52	Fe/-	8-8.5
48718T	Spot Calib. for	48718 -21			15min@15V	124 3900 D3 4300	D2 4810		
48716F	Focus test					0 0	-8°	Fe/-	20-20
48719	HD36485	05 26.9	-0 22	01 56	03 35	1 41W	-0 16	Fe/-	6-6
48720	HD37479	05 33.7	-2 39	03 39	05 16	3 15W	-2 34	4	6-6.5
48721	HD76095	08 49.0	+26 36	05 20	06 47	1 30W	+26 19	-	6 6.5
48721F						0 0	11		

Spectr. T
Focus
Spectr.

Exp Mir

Spectr. Temp. +38°f Dome Temp./Hum. +29°f/65% Transparency Conditions Cloudy 2.30 12

Focus 513

Spectr. Temp. ~~-27~~ -27.5°f Dome Temp./Hum. +17°f/70%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
20/48	3-4"	5.04	M43-M	BC	1200/507	BS	II-O-E	B	Pg prog	cloud ended exp	
"Also for the wk pic"; #48317 of last night.							IIaO-E				
				BC	1200/507	BS	"	B	Set 513 T=37.5°f		ok
30/240	4"	670	B3Up	BC	830/40.2	BS	"	B	He-Neh	Set 517 T=35°f	
40/118	4"	6.22	B2Up	"	"	"	"	A	"		
40/50	4-6"	27.5	G0	"	"	"	"	B	Asm Sp	Set 519 T=30°f	sl wk
				"	"	"	"	A		" T=27.5°f	ok

13

mon-Tues

Date Dec 19-20/84 Observers B.t.-Tn...Steve Carbon

Emulsion Batches: 8m 68° II-aD-E 19103—15114

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48721F2	Focus test					2 0 W	+10°	Fe/-	15-15
	10 Lac								EST Time
	δ And								
	α Cas								
	α Tri								
	o Psc								
	γ And A								0 5
48721F3	Focus test					0 0	+7°	Fe/-	10-10
48722	HD 37776	05 35.9	-01 32	01 33	0302	1 02 W	-1 3'	Fe/-	6-6 6
48722	T Spot Calib for 48722-26				15 min	0 15 W	124 3900 03 4300	D7 4810	
48723	HD 37479	05 33.7	-2 39	03 04	03 55	1 5 W	-2 32	Fe/-	6-6-6
48724	"	"	"	03 56	05 06	1 10 W	"	"	6-6-6
48725	HD 76151	08 49.4	-5 04	05 10	06 14	1 01 W	-5 20	"	6-6-6
48726	HD 81797	09 22.7	-8 14	06 16	06 21	0 3 W	-8 32	"	8-8
48726F	Focus					"	"	"	15-15

Spectr. Temp. +30°F Dome Temp./Hum. +25°F/55% Transparency Conditions Clear, then cloudy ... 14 ... Then clear

Focus set 522

Spectr. Temp. 23°F Dome Temp./Hum. +17°F/95%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				BC	150/23.5°	BS	IIaO-E	A		Set 522 T=30°F	Cont slides
Vinetemp				Pocket spectrograph						Other records kept	
							Note	All	pocket plates developed		
								in	"MS" for 15 mins		
20°F											
18°F											
				BC	150/23.5°	BS	IIaO-E	A		Set 524 T 24.5°F	OK
40/115	3-5"	6.3	B2V	BC	830/40.2°	"	IIaO-E	A	He rich	Set 521 T 24°F	for inst'l fine
							IIIaO-E				
40/97	4-5"	6.32	B2Vp	BC	830/40.2	BS	"	C	He rich	some clouds	for fine
40/115	2"	"	"	"	"	"	"	A	"		fine
40/119	3"	6.7	B3	"	"	"	"	B	Asm Spark	23°f	fine
4/9	"	2.2	K2II	"	"	"	"	A	stivel	23	for fine + no
				"	"	"	"	B		23°F Hal 521	cont blue

15 Tues-Wed

Date Nov. 20-21, 1894 Observers B.t.-T.n.

Emulsion Batches:
8"@68° IIaO-E 19103 -15114
5"@68° IIaI-E 31083 -07414

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
	α Tri	1 47.4	+29 06	19 48	19 55	0 40 W			
	δ And	0 34.0	+30 19	22 55	22 59	0 05 W			
	α Cas	0 34.8	+55 59	23 07	23 11	2 16 W			
	ο Psc	1 40.1	+8 39	23 22	23 34	1 33 W			
	δ And A	1 57.7	+41 51	00 48	23 52	W			
	α Ari			00 01	00 03	W			
	h Per			00 14	00 23	W			
AB	HD26015 & others.								
48727	HD19056	2 58.8	+38 27	01 25	01 45	02 26 W	+38 51	Fe/-	12-12
48728	HD21699	3 25.1	+47 41	01 50	03 53	04 06 W	+48 01	Fe/-	22-2
48727.1	Spot Calib for 48727,30				15 min @ 15V	D4 3400 17.5V	D3 4300 15V	V2 4810 15V	
48728.1	Spot Calib for 48728-29,31				15 min @ D4	3400	4300	4810	
48729	HD76644	8 52.4	+48 26	04 02	04 19	0 54 E		Fe/-	22-2
48730	HD66751	7 59.9	+70 0	04 27	05 53	1 28 W	+69 49	"	8-8
48731	HD56986	7 14.1	+22 10	05 57	06 18	2 44 W	+22 09	"	22-2

Spectr. Temp. 25°f ..... Dome Temp./Hum. +23°f/9%? Transparency Conditions . S/hz g ..... 16..

Focus .... 514 .....

Spectr. Temp. ..... Dome Temp./Hum. +18°f / 95?

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
		390	F6 IV	Pocket Spectrograph			IIaO			Separate mount used	
		4.52	K3 II				"				
		3.40	K0 IIIa				"				
		5.22	G8 II				"				
		3.31	K3 IIb				"				
Fe- 12	40/170	2"	5.04	M4 II III	BC	1200/-0	135	IIaO-E	A	Ry Prog	set 514	fe sl str fine
Fe- 22-2	20/211	2"-3"	5.36	B8 III	"	"	"	IIIaJ-E	B	Herick	cloud	Fe wk vsl wk
								IIaO-E				
								IIIaJ-E				
Fe- 22-2	30/176	2"	3.32	A5	BC	1200/50	135	IIIaJ-E	A	Atm sp		Fe sl wk vsl str-
" 88-6	40/120	2-3"	3.7	A5	"	"	"	IIaO-E	15	"		fine
" 22-2	20/155	2"	3.9	F0 IV	"	"	"	IIIaJ	A	"		Fe sl wk fine

Emulsion Batches:
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Date Nov. 20-21/24 Observers BSt-Tn

cont. from last page

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48732	HD 2197	9 22 7	-8 14	06 23	06 33	0 52W	-8 34	Fe/-	22-20
48732	F					"	"	"	20-20

Spectr. Te
Focus....
Spectr. Te
Exp. Mtr.
4/24

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions 18

Focus 514

Spectr. Temp. ..... 23 ef Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1/24	2"	2.2	K3II	BC	1200/50.7	BS	IIIaJ-E	B	Std Vel		
							IIaO	B			

Comparison
pe/Filter Exp

19

Date NOV 21-22 1954 Observers Bo Ri

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
	HD 224926	23 56.7	-03° 35	21 39	22:18			Fe UE WR66	1
	COMP								3 SEC
	FLAT FIELD	90 SEC		23:55					
	"	"		23:57					
	"	"		00:00					
	"	"		00:04					
	FLAT FIELD	90 SEC WITH ND.6							
	"	60 SEC WITH ND.6							
	"	"	NO FILTER	00:20					
	"	45 SEC	" "						
	"	45 SEC	" "	00.29					
	"	45 SEC	WITH ND	0032					
	"	30 SEC	"	0035					
		30 SEC	NO FILTER	00 39					
		15 SEC	" "	0042					

pectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions ..... 20..

ocus .....

pectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
40/50		V 5.1	B&L	BC.	1800/.562	250 μ	PERKIN			YELLOW OVER SLIT	
										cleaned IN	
				BC	1200/42.5	250 μ	"				
										14538	
										14536	
										14537	
										6469	
										4289	
										13837	
										10625	
										10911	
										3233	
										2118	
										7354	
										3634	

21

Emulsion Batches:

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Date ..... Observers .....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
	FLAT FIELD	5 SEC WITH ND06		00:46					
	"	10 SEC WITH ND06		00:48					
	"	10 SEC NO FILTER		00:50					
	"	5 SEC	"						
	"	5 SEC WITH ND0.6							

Spectr. Ter

Focus....

Spectr. Ter

Exp. Mtr

pectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions ..... 22..

ocus .....

pectr. Temp. ..... Dome Temp./Hum. .....

Compar. Type Filter	xp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
					B.C.	1200/42.5		RETHON			1092	
											676	
											2274	
											1276	
											312	

23

Date Nov. 24-25/24 Observers BJ-RI

8h 68° Emulsion Batches: I-00-E 19103-20114

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
* 33 48732	HD181276	19 14.8	+53 11	17 20	17 43	2 45W	+53 22	Fe/	8 8-8
34 48733	HD185144	19 32.6	+69 29	17 47	18 34	3 00W	+69 42	Fe/-	8 8-8
35 48734	HD194317	20 19.9	+31 52	18 36	20 29	4 04W	+32 10	Fe/-	8 8-8
V 48734	SPOT CALN'S FOR PLATES 48732 - 48737					15 MIN @ 15 VOLTS	① D4 3900 ② D3 4300 ③ D2 4010		
36 48735	HD19058	2 58.8	+38 27	20 37	0 55	2 07E	+38 50	Fe/-	8-8-
37 48736	HD13611	2 07.7	+8 23	21 02	21 31	0 41E	+8 48	Fe/-	8-8-
38 48737	HD22454	3 31.8	+0 05	21 34	21 52	1 44E	+0 20	Fe/-	8-8-
48737F	FOWLER							Fe/-	20 4

* relabelled Jan (plates done correctly)

Spectr. Temp. 42°F Dome Temp./Hum. 4°C / 80% Transparency Conditions thickening fog 24

Focus 510

Spectr. Temp. ..... Dome Temp./Hum. 1°C / 99%

Comparison Type Filter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/ 85	20/150	1"-2"	4.73	G9III	BC	1200/30.7	BS	IIaO-E	A	Archive		slight
Fe/ 85	20/150	"	5.47	K0V	BC	1200/30.7	BS	IIaO-E	B	Archive		slight
Fe/ 85 3 DC 40.0	20/200	2"-3"	5.76	K3III	BC	1200/30.7	BS	IIaO-E IIaO-E	A	Archive	T=42°F fog	slight
Fe/ 85	20/80	2"-3"	5.04	M4III G6III-IV	BC	1200/30.7	BS	IIaO-E	B	By Prog		fine
Fe/ 85	20/80	2"-3"	5.26	CN-2	BC	1200/30.7	BS	IIaO-E	A	Archive		fine
Fe/ 85	E.'32	3"	4.4	F8V	BC	1200/30.7	BS	IIaO-E	B	Std Vel	CLOSED UP	fine
Fe/ 85					"	"	"	"	A	T=40°F	DUE TO FOG + HUMIDITY	no middle of Ca K

25

Thurs-Fri

Date Nov. 29-30, 1984 Observers K.L.-T.-B.J.

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48739	o And	22 57.3	+41 47	20 58	21 03			Fe 1c	5
	"			21 11	21 22			"	"
	39 Pi And	00 36.0	+33 38	21 34	22 05			"	"
	35 Ari	02 42.6	+27 39	22 17	22 46			"	"
	HD 21699	03 31.0	+47 58	22 58	00 00		+48 01	"	"
	HD 37042	05 39.4	-5 26	00 19	02 50		-5 23	"	"
	Flt Fld			40 sec			ND 0.6		
	Flt Fld			40 sec			Clear		
	Flt Fld			35 sec			Clear		
	" "			35 sec			Clear		

Spectr. Temp. ..... Dome Temp./Hum. ...../..... Transparency Conditions .....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. ...../.....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				BC	600/42°	*250/13		RCA/Recon		*Bellafilla	
30/300				"	"	"	2556 cts	"			Fair
0/250	3"		B5V	"	"	"	2800	"	Baj prog	some cloud	Fair
0/250			B3V	"	"	"	3099	"	"		Good
0/252			B2UBp	"	"	"	3110	"	"	some cloud	fair
0/132	3"-5"		B0.5V	"	"	"	1913	"	"	cloud T=-128.1°C (T=-127.4 at end)	
T=-127.4°C							1513	"			
T=-127.3°C							4960	"			
							3132	"			
T=-127.5°C	(Head reading error? while I unclamped telescope tube after?)										

27

Sun-Mon

Date Dec. 2-3/84. Observers BT. Ta

Emulsion Batches: IIa0-E 19103 - 20114

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48739	HD 37017	5 30.4	-4 34	01 10	02 49	1 46W	-4 29	Fe/.	8-8-8
						D4	D3	D1	
48739T	Spot calib for 48739				15min e 15V	3900	4300	[illegible]	

Spectr. Temp. +37°f Dome Temp./Hum 33°f / 92% Transparency Conditions Some cloud 28

Focus 5.12

Spectr. Temp. [illegible] Dome Temp./Hum 31°f / 106%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
30/273	2"-3"	6 42	B_2V_p	BC	1200/5000	BS	IIaO E	A	He Rich		Sl wk
							IIaO-E			Cloud & gusty	

-29

Date 1984 Dec 13/14 Observers KK-Ri

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
4874D	HD 217675	22 57.3	+41 47'	19 56"	20:28			FeNe W 66	1 s
	HD 12533	1 57.7	+41 51	20 40	20 50			"	"
	HD 12533	"	"	20 53	21 15			FeNe W 66	2 sec
	Flat fields	Low gain	75 sec						
	"	repeat							
	"	High gain	40 sec						
	"	"	"						
	"	"	"						
	"	"	"						
	"	HIGH GAIN	20 SEC						
	"	"	"						
	"	"	"						
	"	HIGH GAIN	10SEC						
	"	"	"						
	"	HIGH GAIN	4SEC						
	"	"	"						

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions ..80% clouds..... 20

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
yellow filter 250020	6"	3.6	B6p	BC	1200/42°	25D/.5	RETICON		AsnSp/KK	passing clouds, trailing	2119
401068		V= 2.28	K3 II	"	"	"	"		spec standard		4347
201052		"	"	"	"	"	"		"	Low gain setting →	3035
yellow Filter OVER EXIT										" " "	2516
"	"									" " "	2513
"	"									HIGH GAIN SETTING	5604
"	"									"	5503
"	"									"	5527
"	"									"	5454
"	"									"	2831
"	"									"	3818
"	"									"	2726
"	"									"	1367
"	"									"	1387
"	"									"	507
"	"									"	502

31

Emulsion Batches: .....

Date 1984 DEC 13/14 CONT Observers KK-RI .....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48740	FLAT FIELD		HIGH GAIN	3 SEC					
	"		"	"					
	"		"	2 SEC					
	"		"	"					
	"		"	1 SEC					
	"		"	"					

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions 32

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
YELLOW FILTER OUT										HIGH GAIN SETTING	406
"		"								" "	402
"		"								" "	222
"		"								" "	318
"		"								" "	155
"		"								" "	61

33 Mon-Tues

Date Dec 17-18/84 Observers BT-R

Emulsion Batches: IIaO: E.19103-20114

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48740	HD219734	23 13.1	+48 28	17 22	19 50	2 03W	48°58	Fel-	8-8-
48741	HD19058	2 58.8	+38 27	1957	20 33	1 01E	38 46	"	8 8 2
48742T	SPOT CALN FOR PLATES		48740,41		15 MIN @ 15 VOLTS		3900 D2 4300 D3	D2 4810	
48742F	FOCUS TEST							Fel-	20-2

Spectr. Temp. 47°F ..... Dome Temp./Hum 38°F / 95% Transparency Conditions poor ..... 34...

Focus ..510.....

Spectr. Temp. ..... Dome Temp./Hum. 35°F / 99%

Comparison Type/Filter Exp.	Exp. Mtr. GAW2500	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fd. 8.8	12006	5"	6.52	M2III	BC	1200/50T	BS	IIaO-E	A	Archive	RATE READING .3 UNITS	fine
" 8.8	9092		5.04	M4II-III	"	"	"	"	B	Py Prog	T=43°F F=511	
D2 4810								"			Clouds, high humidity	
Fd- 20.20					B.C.	1200/20.7	B.S.	"	A		T=43°F F=511	OK
↓												
New exposure meter electronics, capacitance increased 10x from last observing night ⇒ gain 0.1 x												

35

9m 68° Emulsion Batches: IIaO-E 19103 - 17124

Date Sat-Sun Dec 22-23/84 Observers Kly-Tn

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp	Spectr. Ten / Focus / Spectr. Ten / Exp Mtr.
48742	MD 66751	7h59m9	+70° 0'	23h45m	01 19	0100E	+69 48	Fel-	9-9-9	2743
48743 T	Spot Calib	for 48743			15 min @ 15V	D4 3900	D3 4300	D2 4810		

Spectr. Temp. ..32°F..... Dome Temp./Hum. 25°/75% Transparency Conditions ..some cloud..y..5..36

Focus ....5.15.....

Spectr. Temp. ..30°F..... Dome Temp./Hum. 24°/80%

B filter

Comparison Type Filter Exp	Exp. Mtr. Zeiss 2500	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
F 2.9	2743	5"	✓ 6-48	dF8	BC	1200/ 50°7	BS	IIaO·E	A	KK AsmSp	cloud	s/wk
								IIIaO-E				

37
(1)

Date Sun. Mon. Dec. 30-31/84 Observers K.Ky.-Tn.

Ri Tan3 8min@68°F D19 Ri Tan4 4⅓min@68°F D19

Emulsion Batches:
IIa0-E ... 19103 ... -17124
IIIaJ-E ... 31083 ... -07114

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp
48743	Vulp Nova Collins	20 22.8	+27 30	17 36	18 40	0434W	+2752	Fe/-	9-7
48743F	Focus	-First+		17 33		0330W	+2752	"	20-2
48744	HD 217782	22 58	+42 13	18 47	19 04	0223W			1-13
48744T	Spot Calc for	48743-44,46,48,52-53.		15min@15V	17.5V 3900	15V 4300	15V 4810		
48745	HD 219080	2308.0	+48 51	19 09	19 44	0253W	+4951	Fe/-	20-26
48745T	Spot Calc for	48745,47-48,50,51,54-55.		15 min@D4	17.5V 3900	15V 4300	15V 4810		
48746	HD 6582	1016	+5426	19 48	20 15	0128W	+5454	Fe/-	13-1
48747	HD 6961	1050	+5437	2018	2039	0150W	+5525	"	7-2
48748	HD 29316	4 32.0	+5317	20 42	2217	0000W	+5329	"	2½-3
48749	HD 66751	7 57.9	+70 00	22 22	0038	0110E	+6951	"	9-9-
48750	HD 47105	6 31.9	+16 29	0043	0046	0031W	+1636	"	15-2
48751	HD 56786	7 14.1	+22 70 (+22 10 Vfw)	0049	0102	0035W	+2205	"	25-2
48752	HD 71974	8 25.2	+35 18	0106	0408	0159W	+3504	"	9-9-
48753	HD 76095	8 49.0	+26 36	0412	0625	0353W	+2617	"	9-9
48754	HD 76644	8 52.4	+4826	0631	0642	0407W	+4807	"	25-

Spectr. Temp. 38° F Dome Temp./Hum. 33°F / 62% Transparency Conditions good - v. hazy 38

Focus 51.3

Spectr. Temp. 28° Dome Temp./Hum. 27° / 100%

Comparison Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	0053	2-3"	~6.5 V		BC.	1200/50.7	BS	IIIa-E	B	Nova		
					"	1200/50.7	"	IIaO	A		Fld drawn: cloudy	
	6179	2-3"	5.17	AII	"	"	"	IIaO-E	A	KK Asm Sp		fine
								IIaJ-E				
	2165	2-3"	4.90	FOIV	BC	1200/50.7	BS	IIIaJ-E	B	KK Asm Sp	2.4V a little	fine
								IIIaJ-E				
	0498	2"	5.81	GSIV	BC	1200/50.7	BS	IIaO-E	A	KK Asm Sp	0.9V a little	
	0792	2"	4.50	AIV	"	"	"	IIIaJ-E	"	"		fine
	0119	2"	5.36	A5m	"	"	"	IIIaJ-E	A	"	1.1V a little Broken Spec cloudy	fine slit
	5119	2"	V 6.48	dF8	"	"	"	IIaO-E	B	"	T=35 Set 515 V3	
	1574	3"	1.9	A0IV	"	"	"	IIaJ-E	A	"		fine ws
	5443	2-3"	3.9	FOV	"	"	"	"	B	"	3.3V a little	
	3505	3-4"	V=7.5	G5	"	"	"	IIaO-E	A	"	3hrs	good
	6050	2"	V=7.1	GO	"	"	"	"	B	"	515 T=29°	fine
	0718	"	3.32	A5	"	"	"	IIIaJ-E	A	"		good

⇒OVER

(2) 39

Date Dec 30-31 Observers Kly - Tr

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp
48755	HD 89449	10 14.3	+19 59	0647	0718	0336W	+19 37	Fe/-	25-25

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions .....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Comparison Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe-	2124	2"	5.3	F6IV	BC	1200/ 50°7	BS	IIIaj-E	B	STDVEL	dawn	

Note - KK - There are no more IIIaJ in Dome, I noticed some in hall frig.

41 Thurs-Fri Nicho - ge- Nova Collins Ri-Tau 4 Sw. e63°F D19

Date Jan. 3-4/85 Observers BL-RI

Emulsion Batches: IIaO E 19103-17124

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
45756	Vul Nova Collins	20 22.8	+27 30	17 33	9 14	5 25W	+27 52	Fe/-	9.9-9
45757	HD23862	3 43.2	+23 50	19 21	19 51	1 19E	+24 08	"	9.9-7
45758	HD17915	2 47.6	+16 5	19 56	23 17	3 03W	+16 27	"	9.9-
45758	SPOT CALIB FOR PLATES 45756-				15 MIN @ 15 VOLTS	① 3900	② 4300	③ D2 4810	
45759	HD37776	5 35.9	-1 32	23 26	01 06	2 04W	-1 27	Fe/	7.7-
45760	HD66751	7 59.9	+70 0	01 15	04 00	2 30W	+69 50	"	9.9-
45761	HD102212	11 40.7	+7 5	04 08	04 55	0 11E	+6 38	"	9.9
45762	HD112769	12 53.9	+17 57	04 59	06 20	0 01W	+17 32	"	9.9-
45763	HD111512	12 46.5	+25 5	06 24	06 52	0 40W	+25 [illegible]	"	9.9
48764	HD137909	15 23.7	+29 27	06 58	07 05	1 42E	+29 13	"	9
45761	FOCUS TEST							Fe/	2

Spectr. Temp. 29°f ..... Dome Temp./Hum. 22°f / 65% Transparency Conditions OK ..... 42..

Focus ... 515 .....

Spectr. Temp. ..... Dome Temp./Hum. -11°c / 97%

Comparison Type Filter Exp.	GAIN Exp. Mtr. 2500	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/- 9.0	6000	3"			BC	1200/507	BS	IIaOE	A	Nova	RME TEL LIMIT .3	comp on stellar
- 9.0	10002		5.01	B8	"	"	"	"	B	Gry Pgm	Set-516 Rate 1.3	
- 9.0	11003		V 6.31	F5III	"	"	"	"	A	Archive	Rate .3	fine
③ D2 4810								IIaO-E				
Fe - 12	8000	3"	6.83 V	B2V	BC	830/402	BS	IIaOE	B	Blm He Rich	Rate .2 T=24°f Set 517	FK-m! fine
- 11.0	7000		6.45	dF5	"	1200/507	"	"	A	KK Asm Sp	Rate .3 T=23°f Set 518	fine
- 9.0	12000		5.54	M.IIIab	"	"	"	"	B	Archive	Rate .1	SI SKY
- 11.0	12014	3-4"	6.3	M.III	"	"	"	"	A	Archive	Rate .5	SI SKY
- 11.0	10005	"	4.6	G5Ep	"	"	"	"	B	Archive	Rate 1.5	fo fine fine
- 11.0	10035	"	3.93	F0p	"	"	"		A	KK Asm Sp	Rate .5	fo SI SKY fine
Fe - 11.0					"	"	"	"	B		T=20°f Set 518	OK

4B Tues-Wed

Date Jan 8-9/55 Observers BT-R

hand agitated 8m 69°

Emulsion Batches:
IIaO-GG 1910.3-31124
IIIaF-b 31083-06915
IIaD-EK 19103-06915

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48765T1	Focus							Fe/-	20-20
48765T2	Focus							Fe/-	1-40
48765	Vul Nova Collins	20 22.8	+27°30	17:40	18 55	05H26W	+27°52	Fe/-	7-7
48766	HD21699	3 25.1	+47 41	1910	20 31	0 03E	+48 02	Fe/-	17-17
48766F1	SPOT CAL FOR PLATES 48765				15MIN@15VOLTS	① D4 3900 ② P3 4310 ③ D2 4810			
48767	HD23562	3 43.2	+23 50	20 36	20 59	0 07W	+24 08	Fe/-	9-9-9
48768	HD37776	5 35.9	-1 32	21 06	23 08	0 26W	-01°27	"	7-7-7
48768T	SPOT CAL FOR PLATES 48766				15MIN@D4	① 15V 3900 ② 15V 4310 ③ 15V 4810			
48769	HD37017	5 30.4	-4 34	23 13	00 46	2 09W	-4 27	Fe/-	7-7-7
48770	HD66751	7 59.9	+70 00	00 56	03 25	2 14W	+69 53	"	9-9-9
48770T	SPOT CALS FOR PLATES 48770-72				15MIN@15VOLTS	① D4 3900 ② D3 4310 ③ D2 4810			
48771	HD92125	10 33.1	+32 30	03 33	04 06	0 27W	+32 07	Fe/-	9-9
48772	HD112264	12 50.4	+47 44	04 13	06 52	0 57W	+47 47	"	9-9
48773	HD137909	15 23.7	+24 27	06 58	07 16	1 11E	+24 12	"	25
48773F	FOCUS TEST							"	20-20

Spectr. Temp. ..... Dome Temp./Hum. -15°C/67% Transparency Conditions poor ..... 44 ...

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. -20°C/67%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				B.C.	300/50.7	B.S.	IIaO	A		T: 16°F F: 518 Cent vs/real	
				B.C.	830/40.2	B.S.	IIaO	A		T: 16°F F: 523	Ok
1850	4-5			B.C.	830/40.2	B.S.	IIaO-E	B	Nova	9 plates HMT BROKEN 2 PIECES	
25019	4	5.36	B&W	BC	1200/50.7	BS	IIaO-E	A	Bln He Rch	T: 13°F F: 518	
							IIaO-E				
10019	4	5.01	B&W	BC	1200/50.7	BS	IIaOE	B	Gry Pgm	T=12°F F=519	fine
8000	4-5	6.53	B2V	"	830/40.2	"	"	A	Bln He Rch	T: 10°F F: 525	fine
							IIIaJ-G				
8000	4-5	6 42 V 6 48	B2V	BC	830/40.2	BS	IIaOE	B	Bln He Rch	T=9°F F=526 (Emulsion pulled)	fine fine
5002			IIIFS	"	1200/50.7	"	IIaOE*	A	KK Asm Sp	T=6°F F=520 VV	slick
							IIaO-E*				
10005		5.52	G2Ia	BC	300/50.7	BS	IIaOE*	B	Archive	T=6°F F=523	fine
8000		7.39	M5III	"	"	"	IIaOE	A	Archive	T=5°F F=520	fine
7007		3.93	F0Ia	"	"	"	IIaJE	B	KK Asm Sp	T=3°F F=522	
				"	"	"	IIaO	A		T=3°F F=522 DAWN	OK

45 Wed-Thurs

Date Jan 9-10/85 Observers BL-Tn

Emulsion Batches: IIaO-E 19103-06015

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48774	Vat Nova Collins	20 22.8	+27 3C	17 3T	18 10	4 444	+27 52	Fo/	87-6
						D4 D3	D2		
48774T	Spot Calib for	48774			15 min @ 15V	3900 4300	4810		

Spectr. T
Focus
Spectr. T
Exp. Mtr
137

Spectr. Temp. +10°F ..... Dome Temp./Hum. 10°F/60% Transparency Conditions ge Hig. c. early ..... 46 ....

Focus 526 .....

Spectr. Temp. ..... Dome Temp./Hum. ...../.....

Comparison Type/Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/Fe		1837	1"	~7	blue	BC	830/140.2	BS	IIaO	A	Nova	cloudy K605 absolutely blank	
									IIaO-E			(...)	

47

Date JAN. 15/1985 Observers RI

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
	90 MIN DARK NO WINDOW HEATER			09:25	10:55	0h00	+30°00		
	90 MIN DARK NO WINDOW HEATER			11:30	13:00	0h00	+30°00		
	90 MIN DARK WINDOW HEATER ON			13.05	14:35				
	"			14:40	16:10				
	8 MIN DARK			16:12	16:20				
	WITH WINDOW HEATER		ON	16:22	16:30				

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions ..... 48 ...

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	END OF			RETICON	COVER	WITH	BLACK	TAPE.		T= -149.9	54
				"			"			T= -149.8	9
				"			"				
				"			"			T= -150.0	12
				"			"			T= -149.9	10
										T= -150.0	-12
											-2

49 Tues-Wed

Date Jan. 15-16/85. Observers LJ-Jn

Emulsion Batches:
8m 68°. IIaD-E ..19103 ..09015
5m 68°. IIaJ-E ..31043 ..05015

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
45774	Vul Nova Cld	20 22.8	+27 30	17 52	18 24	5 25W	+27 53	Fel-	7-7
45775	HD21699	3 25.1	+47 41	15 38	22 32	2 24W	+47 59	Fel	17-17
48776 T	Spot Cals	for 48774, 80-85.			15 min @ 15V	3400 D4	4300 D2		
48775 T	Spot Cals	for 48775-79			15 min @ D4	17.5V 3400	15V 4300	15V 4200	
45776	HD37043	5 30.5	-5 59	22 38	22 50	0 40W	-5 52	Fel-	17-17
45777	HD47105	6 31.9	+16 29	22 56	23 05	0 36E	+16 30	"	25-25
45778	HD56986	7 14.1	+22 10	23 09	00 23	0 29W	+22 6	"	17-17
45779	HD76644	8 52.4	+45 26	00 27	00 56	0 34E	+45 10	"	17-17
45780	HD99025	11 15.7	+11 5	01 02	02 18	1 38E	+10 37	"	13-13
45781	HD95262	11 13.1	+33 38	02 24	03 4[illegible]	0 11E	+46 48	"	8-8
45782	HD109358	12 28.9	+41 54	03 46	04 20	0 48E	+41 31	"	8-8-8
45783	HD137909	15 23.7	+29 27	04 26	04 44	3 17E	+29 "	"	8-8
45784	HD127665	14 27.5	+30 49	04 48	06 12	0 53E	+30 31	"	13-13
45785	HD124897	14 11.1	+19 42	06 15	06 44	0 04W		"	13-13
45786 F	Focus					"	"	"	20-20

Spectr. Temp. 16°F Dome Temp./Hum. 8°F / 17% Transparency Conditions Sl. hazy, some cirrus 50

Focus 523

Spectr. Temp. +21.5°F Dome Temp./Hum. -1°F / 85%

Comparison Type/Filter Exp	Exp. Mtr. V: 2.76	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	81	5-10"			BC	830 / 402	BS	IIaO E	A	Nova	vv	wk
	5590	5-10	5.36	B8III$_p$	BC	1200 / 50.7	BS	IIaJ E	B	Bkgd Ref	F=521	wk
								IIaO E		Nova Lulin 74		
								IIIaF E				
	10110	10"	V 2.76	O9III	BC	1200 / 50.7	BS	IIaJ E	A	Ly Prog		sl wk
	20110	"	1.9	A0III	"	"	"	"	B	KK Asm Sp		fine
	35251	"	3.9	F0IV	"	"	"	"	A	KK Asm Sp		fine
	20 000	"	3.32	A5	"	"	"	"	B	KK Asm Sp		fine
	10 000	"	4.34	F2IV	"	"	"	IIaO E	A	KK Asm Sp	Fe s/str	fine
	10092	8-4"	4.85	K3III	"	"	"	"	B	Arc Live	T=+5°F set+523	Fe s/str s/str
	10062	3-5"	4.85	G0V	"	"	"	"	A	Arc Live		fine
	10180	3"	3.95	F0$_p$	"	"	"	"	B	KK Asm Sp		fine
	9505	3-5	4.58	K3III	"	"	"	"	A	Arc Live	cloud	fine
	12134	3"	1.29	K2II$_p$	"	"	"	"	B	Std Vel	mod cloud	sl wk
					"	"	"	IIIaO	B		set+523 T+35°	cont Ref

51 Thurs-Fri

Date Jan. 17-18, 85 Observers Ly-Tu

Emulsion Batches: δ+68° II-aO-E 1910.3 — 01305

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Ex
4878	HD 11188	01 44.9	+44 58	18 07	20 30	2 13 W	+	Fe - 77	6:2
4878T	Spot Calc for 4878				15 min @ 15V		D4 D3 3900 4300	D2 4810	

Spectr. Temp.
Focus ... 5
Spectr. Temp

pectr. Temp. 125°F Dome Temp./Hum. 70°/75% Transparency Conditions some cloud 52.

ocus 5.15

pectr. Temp. Dome Temp./Hum. 117°/75%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
6182	1"2"	71	B8	BC	1200 Å/mm	BS	D-E	A	SB Ly	cloud	Fe fine VS/wk
							D-E				

Component Type/Filter Exp

53 Fri Sat

Date JAN 25-26 85 Observers H.L.-R.

Emulsion Batches: 5" 67° II-G

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
48787	BS. 813	1982 2 44	+10 02	18 45	18:55				
48788	+18° 347	2 41.8	+18° 59	19:02	19.00	00h37w			
	TRAIL E Fri			19 17 19:19	19 20	00h23w			

Spectr. Te
Focus...
Spectr. T
Exp.

Spectr. Temp. ..... Dome Temp./Hum. -06°C 90% Transparency Conditions 5.4

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. ..... WORM Gear B20

Exp. Min.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
.4 SEC	4"	4.27	FOIL	DOUBLE CAMERA			IIG			TIME INTERV 5.2 SEC	
2½ & 6 SEC		7.5 8.2	dF9	DOUBLE CAMERA			IIG			TRAVEL 3D	
							IIG				

55 Sat-Sun

Date Jan. 26-27/85 Observers BH-R

Emulsion Batches: 8"68° IIaE 19103 - 18015

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48789	HD6582	1 01.6	+54 26	17 53	18 11			Fe/-	8
48789	HD6582	101.6	+54 26	18 15	18 59	1 58W	+5454	Fe/-	8 8 8
48790	HD18884	2 57.1	+3 42	19 04	19 21	0 27W	+4 04	"	8 8 8
48790T	SPOT CALN' FOR PLATES	48789-92,			15M.IN@15VOLTS				
48791	HD23862	3 43.2	+23 50	19 26	19 55	0 15W	+24 08	Fe/-	8 8 8
48792	HD22484	331.8	+0 05	20 10	20 41	1 12W	+0 23	"	8 8 8
48792T	FOCUS TEST							Fe/-	20 20

Spectr. Temp. 21°F ..... Dome Temp./Hum. -9°C/63% Transparency Conditions CIRRUS + CLOUDS 56

Focus 516 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Comparison Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
			5.8	GSVp	BC	1200/50.7	BC	IIaO-E	A	KK Asm Sp	Wrong Star	
	8002	3"	5.8	GSVp	BC	1200/50.7	BC	IIaO-E	A	KK Asm Sp		re fine Fine
	10045	"	2.8	M-3TH	"	"	"	"	B	Std Vel	9:21°F B=518	Poss SR sl/str
								IIaO-E				
	9186	3"	5.0	B8	BC	1200/50.7	BC	IIaO-E	A	Gry Pgm	9:21°F B=516	Poss SR Fine
	4580	"	4.4	F8V	"	"	"	"	B	Std Vel	9:20°F B=518	Poss sl str s/w
					"	"	"	"	A		9=19°F B=518	Poss sl str s/w
											CLOUDED IN	

57

Date MON. TUES. JAN 28-29/1985 Observers ... Bt - Ri .....

8" 68° Emulsion Batches: IIaD-E 19103-18015 IIIaF+f 31083-06215

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Min.
48793F	FOCUS TEST									
48793	HD 6130	00h 57.1	+60° 32	17:50	18:52	2 06W	+61°03	Fe/-	8-8-8	3005
48794 ✓	HD 11188	1 44.9	+46 58	18:57	21 37	4 04W ① D4 ② D3	+47 22 3" D2	"	8-8-8	6917
48794T ✓	SPOT CALN FOR PLATES 48793				15 MIN @ 1500 LTS		3900 4300 4810			
48795	HD 47105	6 31.9	+16 29	23 09	23 12	0 52W	+16 25	Fe/-	25-25	2003
48796 ✓	HD 66751	7 59.9	+70 0	23 21	02 19	2 26W ① 17.50	+69 48 ② RJ 3" RJ	"	8-8-8	6000
48796T ✓	SPOT CALN FOR PLATES 48796-97.				15 MIN @ D4		3900 4300 4810			
48797	HD 113139	12 56.4	+56 54	02 25	03 22	1 21E	+56 28	Fe/-	8-8-8	5211

Spectr. Temp. 27°f ..... Dome Temp./Hum. -6°C / 80% Transparency Conditions . Poor 58
Focus ... 514½ ..... clouds on and off
Spectr. Temp. ..... Dome Temp./Hum. -9°C / 96%

Comparison Type/Filter	Exp. Mtr. MN=2500	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/-					B C.	1200/50.7	B.S.	IIaO	A		T=27°F F=514½	OK
Fe/-	10005	2-3	6.41	FoII	B C.	1200/50.7	B.S.	IIaO-E	B	Archive	T=27°F F=516	Fair/Poor Fine
"	6917		7.1	B8	"	"	"	"	A	Lg-SB	T=27°F clouds F=514.5	Fair Fine
								IIaO-E				
Fe/-	20032		1.9	AoIV	BC	1200/50.7	BS	IIaJ-E	A	KK Asm Sp	T=25°F F=514	Fine
"	6000		V 6.48	dF8	"	"	"	IIaO-E	B	KK Asm Sp	T=24°F F=517 cirrus clouds	Fine
								IIIaJ-Tef				
Fe/-	5284	4-5	5.29	F2V	BC	1200/50.7	BS	IIaO-E	A	Archive	T=22°F F=516 Closed up dome floor	Fe OK Fine

Note All IIaO emulsions from this night are peeling, particularly #4x794. Even unexposed IIaO for focus shots. Same batch previous night is OK though. Is there something different in development? In Jan 30 → Next night I checked this out & found them peeling at edges

59 Fri - Sat

Date Feb 1 - 2/85 Observers BT - Tn / Red - Tq

Emulsion Batches: IIaO-E - 19103 : 25015

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48798	HD23862	3 43.2	23 50	20 22	21 29	2 12W	+24 07	Fe/-	8-8-8
48798T	Spot Calib for 48798 - 48802				15 min @ 15V	D4 3900	D3 4300	D2 4810	
48799	HD37018	5 30.4	-4° 54'	21 33	22 16	1 13W	-4 49	Fe/-	8-8-8
48800	HD39400	5 47.2	+1 50	22 20	00 45	3 25W	+1 53	"	8-8-8
48801	HD81797	9 22.7	-8 14	00 50	01 01	0 07W	—	"	12-12
48801F							"	"	20-20
48802	HD81797	9 22.7	-8 14	01 12	01 19	00 25W	"	"	4-4
48803	W Ursa Maj	9 36.8	+56 26	01 30	Discarded			"	8-
48803F	Focus					00 2W	+56°	"	66

Spectr. Temp. 28°F ..... Dome Temp./Hum. -9°C/75% Transparency Conditions partly cloudy 60

Focus 515 .....

Spectr. Temp. 116.5°F ..... Dome Temp./Hum. -15°C/80%

Comparison Type Filter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/- 6	9000	6"	5.01	B5	BC	1200/5071	B5	IIaOE	A	Grey Pgm.		f.-c
D2								IIaOE				
Fe/- 6	9008	4"-6"	4.40	B.II	BC	1200/5071	B5	IIaOE	B	Archive	(correct) West of pole	f.-c
" 8	7715	4"-6"	6.16	K1.5II6	"	"	"	"	A	Archive	Some cloud	Fine
" 8	5490		2.2	K3	"	"	"	"	B	Shivel	Set 518 T=118°F	fine
" 8					"	"	"	IIaO	B	"	Set 518 T=117°F	cooler red
" 4	2100	5"	2.2	K3	"	1200/2378	B5	IIaOE	A	std vel	Set 528 sl.	strong
" R		5"	8.3 -9		"	"	"	"	R		Cloud - otherwise	
" 6					"	"	"	IIaO	A		Set 528 T=+16.5°F	cont s/blue

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Sat-Sun

Date Feb 2-3/85 Observers BT-JM

5"68° Emulsion Batches: IIIaJ-E 31083 ~ 12015

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48803	HD86360	9 52.9	+12 55	01 36	03 12	1 52W	+12 33	Fe/-	13-13-1
						17.5V	15V	1"	
48803T	Spot Calib	for 48803-07			15 min @ D4		3900 4300	+2D	
48804	HD112028	12 48.3	+83 58	03 18	05 07	0 53W	+83 33	Fe/-	13-13-1
48805	HD138749	15 28.9	+31 42	05 13	05 40	1 16E	+31 27	"	17-17-1
48806	HD137909	15 23.7	+29 27	05 42	06 03	0 48E	+29 11	"	17-17-1
48807	HD164852	17 58.1	+20 50	06 05	06 55	2 30E	+21 52	"	17-17-

Spectr. Temp. +17°f ..... Dome Temp./Hum. +6°f / 70% Transparency Conditions hazy 62

Focus ... 523 - 520 ...

Spectr. Temp. +11°f ..... Dome Temp./Hum. 13°f / 80%

Comparison Type Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe- 5...	15000	4"	5.22	B4IV	BC	830/402	BS	IIIaJ-E	A	B/n SB		Fine
1... -26								IIIa-J-E				
Fe- 12...	16120	4"	5.28	B8	"	830/402	"	IIaJ E	B	B/n Shell		Fe s/wk Fine
" 17...	20177	4"	4.10	B7nn	"	1200Y/50.7	"	V	A	B/n Be	T +12° at 520	Fine
" 17...	20152	3"	3.93	Fop	"	"	"	"	B	KK Asm Sp	T = +11°f	Fe Fuzzy Fine
" 17...	20238	4-5	5.10	B3IV	"	"	"	"	A	B/n - SB		wk

63

Date Sunday/Mon./Feb. 3-4./1.85 Observers ....K.L.y./T.n./BH-Tn

Emulsion Batches:
5ᴴ 68ᵐ . IIIa J-E . 31083 . . 12015
8ᴴ 68ᵐ . IIa O-E . . 19103 . . 28015

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48808	HD 209790	22ʰ00ᵐ.9	+64 08	18 08	18 38	05 15 W	+64°34'	Fe/-	17-17
						17.5U	15U	15U	
48808T	✓ Spot + Calib for 48808-11, 15.				15 min @ D4	3900	4300	4410	
48809	HD 6582	1 01.6	+54 26	18 45	20 20	3 52W	+5[illegible]	Fe/-	17-17
48810	HD 6961	1 05.0	+5437	20 25	20 56	4 25 W	+55 05	"	25-25
48811	HD 29316	4 32.0	+53 17	21 01	22 29	02 30 W	+53 26	"	25-25
48812	HD 66751	7 59.9	+70 00	12 35	00 47	1 18 W	+69 58	"	8-8-8
						D4	D3	D3	
48812T	✓ Spot Calib for 48812-14.				15 min @ 15U	3900	4300	4410	
48813	HD650411	7 51.7	+43 47	00 52	03 33	4 17W	+43 34	Fe/-	8-8-8
48814	HD94118	10 46.7	+46 20	03 38	05 52	3 42W	+45 58	"	8-8-8
48815	HD164852	17 58.1	+20 50	06 06	06 50	3 28 E	+20 52	"	17-17
48815F	Focus test					"	"		

Spectr. Temp. ..18°F..... Dome Temp./Hum. +13°/65% Transparency Conditions sl. hazy.....64..

Focus .....5.1.6.....

Spectr. Temp. ...11..... Dome Temp./Hum. +5°F / 70%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
20279	2-4"	4.63	A3m	BC	1200 / 507	BS	IIIaJ-E	A	KK AsmSp	Reversed	fine
							IIaJ-E				
5[illegible]C	1"	5.81	G5p	BC	1200/ 507	BS	"	B	KK AsmSp	Reversed	fine
20,600	2"	4.50	A7V	"	"	"	"	A	"	"	good/fine
5,160	2"	V= 5.36	A5n	"	"	"	"	B	"	" T= 15°f	fine
5109	1-3"	V 6.42	dF2	"	"	"	IIaO-E	A	"	"	fine
							IIIaO-E				
7240	2"	6.57	B2V	BC	1200/507	BS	IIaO-E	B	Ly / Gm	Reversal	vs/wk
5436	1-2"	7.13	A2	"	"	"	"	A	Ly / Gm	" T= 13°f	s/wk
14745	3"	5.19	B3IV	"	"	"	IIIaJ-E	B	B1n -SB	telescope in normal position T= 11°F	s/wk
					"	"	IIaO	A		sel SJO T= 11°f	cont s/Red
							KK	More IIaO		[illegible] normal	
							[illegible]	[illegible]	E IaAu (1+5)		
									E IIaJ	[illegible]	
					Jim - There were two boxes of				cuI IIaO in [illegible], why not look there?		KK

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Mon-Tues

Date Feb. 4-5/85 Observers BT-KI

Emulsion Batches:
IIaO-E 19103-28015
IIIaJF 31093-12015
IIaD 19103-04025

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48816F	Focus Test							Fe/-	20-20
48816	HD125584	2 57.1	+3 42	17.55	18 03	0 15E	+4 03	Fe/-	7-17
48817	HD111588	1 44.9	+46 58	18 10	19 48	2 41W ① D4 3900 ② D3 4300 ③ D2 4310	+47°23	"	8-8-8
48817T	SPOT CAL FOR PLATES 48816	-23.		15MIN@15VOLTS					
48818	HD23475	3 40.4	+65 13	19 53	21 49	2 45W	+65 31	Fe/-	8-8-8
48819	HD47105	6 31.9	+16 29	21 55	21 58	0 06W	+16 25	"	17-17
48820	HD56956	7 14.1	+22 10	22 02	22 20	0 14E	+22 05	"	8-8-8
48821	HD62509	7 39.2	+25 16	22 24	22 27	0 32E	+25 07	"	17-17
48822	HD89449	10 14.3	+19 59	22 33	23 24	2 10E	+19 35	"	8-8-8
48823	HD62285	7 38.0	+26 01	23 32	01 05	2 06W	+25 50	"	8-8-8
48824	HD86360	9 52.9	+12 55	01 10	01 45	0 17W ① 17.5V ② 15V ③ 15V 3900 4300 4310	+12 17	"	17-17
48824T	SPOT CAL FOR PLATES 48824				15MIN@D4				
48825	HD115216	13 30.3	+37 42	01 50	03:00	1 51E ① D4 3900 ② D3 4300 ③ D2 4410	+37 16	Fe/-	8-8-8
48825T	SPOT CAL FOR PLATE 48825				5MIN@15VOLTS				
48826F	Focus Test							Fe/-	20 20

Spectr. Temp. 19°F ..... Dome Temp./Hum. -10°/62% Transparency Conditions Cirrus clouds ..... 66.

Focus 51.8 .....

Spectr. Temp. ..... Dome Temp./Hum. -14°/61% Good after M.O.U 19:45 for a couple hrs

Comparison Type/Filter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	4W=2500											
					B.C.	1200/50.7	B.S.	IIaO	A		T=19°F F=516	OK
Fe/- 1	8000		2.8	M1.5III	BC	1200/50.7	BS	IIaO-E	B	Std Vel	T=19°F F=518	Fe str fine
" 2	7000	2"	7.1	B8	"	"	"	"	A	Ly SB	T=19°F F=516	fine
								"				
Fe/- 16	10007		6.35	M2III	BC	1200/50.7	BS	IIaO-E	B	Archive	T=18°F F=519	C L Fine
17	10007		1.9	A0V	"	"	"	"	A	KK Asm Sp	T=16°F F=517.5	O Fine
" 18	10018	3"	3.9	F0IV	"	"	"	"	B	KK Asm Sp	T=16°F F=519.5	U Fine
17	10093		2.15	K0III	"	"	"	"	A	Std Vel	T=16°F F=517.5	Fe str D Fine
" 21	5000		5.3	F6IV	"	"	"	"	B	Std Vel	T=16°F F=519.5	S fine
" 8	10005		6.85	K4-5III	"	"	"	"	B	Archive		fine Fe str fine
17	12000		5.22	B9IV	"	"	"	IIIaJ-E	A	Bln-SB	T=14°F F=518	
								"				
Fe/- 8	14346		5.3	F2IV	BC	1200/50.7	BS	IIaO-E*	B	Ly SB	T=14°F F=520 clouded in	fine
								IIaO-E*				
Fe/- 7								IIaO	B		T=14°F F=520	No Stellar spectra

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Thurs-Fri.

Date Feb 7-8/55 Observers BL-Tn

8" 68° Emulsion Batches: IIaO-E 19103 - 04 25

5" 68° IIIaJ-E 31083 - 12015

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp	Emp. Mtr.	Sc
45826F	Focus Test					0 31E	+0°	Fe/-	15-		
45826	HD22484	3 31.8	+0 05	18 12	18 31	0 09E	+0° 24	"	9-9		
45827	HD36455	5 26.9	-0 22	18 54	21 03	0 27W D4	-0 16 D3	"	66-		
45827	Tv Spot Calc	for 45826	6-30		15 min @ 15V	3980	4280 4210				
45828	HD37776	5 35.9	-1 32	21 15	23 56	3 13W	-1 26	Fe/-	6-6		
45829	HD65041	7 51.7	+43 47	00 07	03 07	4 07W	+43 36	"	6-6		
45830	HD118216	13 30.3	+37 42	03 15	04 16	0 22E	+37 16	"	8-8		
45831	HD138749	15 28.9	+31 42	04 20	04 44	1 52E	+31 28	"	17-17-		
45832	HD137909	15 23.7	+29 27	04 46	05 02	1 29E	+29 11	"	25-		
45833	HD164852	17 58.1	+20 50	05 07	06 40	2 25E	+20 52	"	17-17		
45833	Tv Spot Calc for 45831		-33		15 min @ D4	17.5V 3980	15V 4200	15V 4700			

Spectr. Temp. 19°F ..... Dome Temp./Hum. +9°F/66% Transparency Conditions ..Fine...T.sl.cloudy..68.
gusty

Focus ...522.....

Spectr. Temp. +7°F ..... Dome Temp./Hum. +2°F/68% .....

Comparison Type Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
					BC	830/402	BS	IIaO-E	A			
	5005	3"	4.4	F8I	BC	830/40.2	BS	IIaO-E	A	Std Vel	PAUSE TO RELOAD	F-str fine
	5677	3'	6.7	B2Vp	"	"	"	IIaO-E	B	Bln Hc-Rch	ALL SNOW TO BLOW OFF DOME	Fe sl str fine
								IIa0-E				
	5278	4"	6.83	B2V	BC	830/40.2	BS	IIa0-E	A	Bln HcRich	Maybe sl fogged T=+130F F=525	Fe sl str fine
	6304	3"-6"	6.87	B2V	"	1200/50.7	"	"	B	Ly Pam	RA at the E 4"W T=10°F F=521	Slwk
	6701	5-3"	5.3	F2IV	"	"	"	"	A	Ly 58	T=+7°F (2x mg)	Fe ck fine
	9782	2-3"	4.1	B7mm	"	"	"	IIIaJ-E	B	Bln Bc		Fine
	20261	"	3.93	F0p	"	"	"	"	A	KK Am		Fine
	11595	3"	5.19	B3V	"	"	"	"	B	Bln 58	set 522 T=+6° cloud	Slwk
								IIIaJ-E				

69 Fri-Sat

Date Feb 8-9/85 Observers BT-Tn/Tn

5m 68° Emulsion Batches: *newer Batch IIaJ-F 2911.4 -06025

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Ex	Exp. Mtr.
48834	HD47105	6 31.9	+16 29	21 58	22 05	0 29W	+16 26	Fe/-	26-1	20946
48835	HD56986	7 14.1	+22 10	22 08	22 27	0 08W	+22 02	"	26-2	25153
48836	HD86360	9 52.9	+12 55	22 33	00 01	0 58E	+12 33	"	13-17	31102
✓48837	HD81797	9 22.7	-8 14	00 06	00 44	0 18W	-8 32	"	18-½	14300
48837	TV Spot Calib for 48834-37				15 min @ D4	17.5V 3400	15V 4300	17V 4900		
48837F	Fan test					0 20W	-8 32	Fe/-	20-1	

Spectr. Temp. 14°F ..... Dome Temp./Hum. +7°F/67% Transparency Conditions ... some ... cloudy ... 70

Focus 5.19 .....

Spectr. Temp. 12°F ..... Dome Temp./Hum. +5?/67? Looked at Orion Nebula, Em Tm + guide

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
20946	2"	1.9	A0IV	BC	1200/50.7	BS	IIaJ-E	A	KK Abm Sp	cloud	Fine
25153		3.9	F0IV	"	"	"	"	B	KK Abm Sp	cloud	Fine
01540	2-3"	5.22	B9IV	"	830/40.2	"	"	A	Bln SB	T=130F F=524 some cloud	Fine
14,900	3"	2.2	K3	"	"	"	"	B	stdvel	cloud	Fine
							II		Looked at & Virgo @01 by [after 2 equal grade]		
				BC	830/40.2	BS	IIaO	B	T=129F F=524	placed in red night Eq by	contr sl red

Comparison Type/Filter Ex

71 Sat-Sun

Date Feb 9-10/85 Observers BT-Tn

8" 68 Emulsion Batches: Ha-E 19103 -04[illegible]5

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
45539F	Focus Test					0 39E	+24 08	Fe/-	20-2
48838	HD23862	3 43.2	+23 50	18 14	18 31	0 15E	+24 08	"	8-4-8
48639	HD111188	1 44.9	+46 58	18 35	20 04	3 16W	+47 23	"	8 4 8
48840	HD66751	7 59.9	+70 0	20 09	21 28	1 37E	+69 50	"	8-8
45540TV	Spot Cal'n for 45538-90				15 min	@04	3900	17.5V 15V 4300	15V 4810

Spectr. Temp 19°F ..... Dome Temp./Hum 14°F/64% Transparency Conditions .. Fine .. some cloud 72

Focus . 5.17 .....

Spectr. Temp. ..... Dome Temp./Hum. ...../.....

Comparison Type/Filter	Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/-						BC	1200/50.7	135	IIaO E	B			contr red
		10077	1-2"	5.01	B8	"	"	"	"	A	Gry Pgm		Fine
		6195	"	7.1	B8	"	"	"	"	B	Ly SB	T=+19°F F=519	
		7674	2"	V 6.48	dF8	"	"	"	"	A	KK Asm Sp	some cloud	Fine
V 151 c 450									II aO-E				

73

Date Tue-Wed. Feb. 19-20/85 Observers ..Kly...../Ri..

8m 67° Emulsion Batches:
IIaJ/E 19103-06025
5m 68° IIaJ/Fg 29114-06025

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
48841	HD 6582	1h 01m.6	+54°26'	18 34	20 36	0511 W	+54°52'	Fe/-	17-17
	*	5h 18.8		20 44					
48842	HD 32147	4h 56.1	-5 52	21 00	2225	312W	-5 43	Fe/-	8-8-8
48843	HD 47105	6 31.9	+16 29	2231	2239	145W		"	25 25
48843T	SPOT CAL'N FOR PLATES 48841, 43, 44				15 MIN @ D4	@ 17.5U 3900	@ 15U 4300	@ 15U 4810	
48844	HD 56936	7 14.1	+22 10	22 45	2320	145W	+22 04	Fe/-	17-17
48844T	SPOT CAL'N FOR PLATE 48842					15 MIN @ D4	@ D3 3900	@ D3 4300	PP 4810
48844F1	FOCUS TEST							Fe/-	20-20

* Stars in pair are now N-S not E-W!

Spectr. Temp. 32° ..... Dome Temp./Hum. 23°F/70% Transparency Conditions ..... → hazy → cloud

Focus ... 513.5 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
19000	3-4"	5.3	G5V$_p$	BC	1200 50°.7	BS	IIIaJ-eb Fg	A	KK AsmSp		Fe slwK V slwK
ABORT				"	"	"	"	B	"	T=28° Set 5/6	
1300	3"	7.27	K3V	BC	1200/ 50.7	BS	IIaO-e	B	KK AsmSp	T=28° slow Set 5/6	OK, but wk
20000	3"	1.9	A0V	"	"	"	IIIaJ-eb Fg	A	"	T=25° " 515	Fo slwK Fine
							IIIaJ-eb Fg			T=25°	
10500	5"	3.9	F0IV	BC	1200/ 50°.7	BS	"	B	KK AsmSp	T=25° Clouds Sun = 516-5	slwK
							IIaO-E				
							IIaO	B			cent red

75 Wed-Thurs

Date Feb. 20-21/85 Observers BT-TN

$8^m 67^\circ$ Emulsion Batches: IIaO.E. 19103-06025

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp Mtr
48845	HD23862	3 43.2	+23 50	22 37	23 00	4 58W	+24 08	Fe/-	8-8-8	
48846	HD65041	7 51.7	+43 47	23 06	00 17	2 07W	+43 36	"	8-8-8	8862
48847	HD89449	10 14.3	+19 59	00 21	00 34	0 04W	+19 35	"	11-11	9405
48847T	SPOT CAL'N for 48845-50				15 min @ 04		17.5V 3900	15V 4300	15V 4510	
48848	HD65041	7 51.7	+43 47	00 38	02 13	4 03W	+43 34	Fe/-	8-8-8	8072
48849	HD115216	13 30.3	+37 42	02 17	03 18	0 29E	+37 12	"	8-8-8	8152
~~48850~~	~~HD43996~~	~~13 2.4~~	~~+28 10~~	03 22	03 34				8	749
48850	HD137759	15 22.7	+59 19	03 40	04 10	1 27E	+59 03	Fe/-	11-11	8340
48850F	Focus test							Fe/-	20-20	

Spectr. Temp. 32°F ..... Dome Temp./Hum. 12.5°F / 100% ? ↳ Transparency Conditions . Sl hazy - cloudy 76

Focus . 514 .....

Spectr. Temp. 129°F ..... Dome Temp./Hum. 122F / 90% suddenly

↳ It seems humid, inside read. 75

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
9072	1"-2"	5.01	B8	BC	1200/50.7	BS	IIaO-E	A	Gry Pgm	T=32°F F=514	Fo sl str Fine
8862	0.5"	6.87	B2V	"	"	"	"	B	Ly Pgm		Fine
9405	1"-2"	5.3	F6IV	"	"	"	"	A	Std Vel	some cloud	Fine
							IIaO-E			Prism tilt @ 3"-30 W	
8072	1"	6.87	B2V	BC	1200/50.7	BS	IIaO-E	B	Ly Pgm	T=30°F F=516	sl wk Fo sl wk sl str
8152	1"	5.3	F2IV	"	"	"	"	A	Ly Pgm	some cloud	
~~710~~		~~6.28~~	~~K5III~~					B	Archive	too much cloud for 6.3 mag star	
3400	2"	4.45	K2III	BC	1200/507	BS	IIaO-E	A	Archive	cloud	Fair
							IIaO	B		Sol=16 T 29	cool red
						4					

77 Wed-Thurs

Date Feb 27-28/85 Observers BT-Tm

8"68° Emulsion Batches: IIaO-E 12103 -06025

5"68° IIIaJ-E 29114 -12025

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
48851F1	Focus Test	PHA vs PHB				0 2W	+25°	Fel-	20-0
48851F2	" "					" "	"	"	
48851	HD36512	5 27.1	-7 23	18 32	19 18	0 0W	-7 18°	Fel-	11-11
48852	HD23862	3 43.2	+23 50	19 24	20 06	2 3W	+24 10	"	12-12
48853	HD47105	6 31.9	+16 29	21 31	21 37	1 15W	+16 26	"	20-20
48854	HD65041	7 51.7	+43 47	21 53	01 06	3 24W	+43 35	"	8-8-8
48853	T' Spot Calib	for 48853, 55-56, 58, 59.			15V@D4			15V	
48851	T' Spot Calib	for 48851 -52, 54, 57.			15V@11V				
48855	HD86360	9 52.9	+12 55	01 14	02 29	2 4W	+12 32	Fel-	13-17-1
48856	HD112028	12 48.3	+83 58	02 36	03 46	1 10W	+83 32	"	15-15-15
48857	HD115216	13 30.3	+37 42	03 54	04 48	1 29W	+37 16	"	12-12
	Observed recurrent nova RS Oph Vmag ≈8. Beautiful sight in vis. too.								
48858	HD138749	15 28.9	+31 42	05 06	05 36	0 19W	+31 28	Fel-	23-23
48859	HD164852	17 58.1	+20 50	05 42	06 28	1 18E	+20 53	"	17-20-17

Spectr. Temp. 32°F Dome Temp./Hum. 21°F/69% Transparency Conditions ..Fine.. 78

Focus ...513-514 etc-516 Good aurora

Spectr. Temp. ..11.. Dome Temp./Hum. +13°F/97% Hilltop Visible Blg Glow

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				BC	120/507	BS	IIaO	A		Set 513 T=30.5°C	Vis/blue
							IIaO	B		Set 513 T=30.5°	red
5551	3"	4.36	B0V	BC	1200/507	BS	IIaO-E	A	Archive	Set 514	Fe vis/blue fine
8573	4"	5.01	B8	"	"	"	IIaO-E	B	Gry Bgm		fine
20140		1.9	A0III	"	"	"	IIIaJ-E	A	KK Asm Sp	Set 516 T=23°	Fe/Ne/H Fine
6152	5"-6"	6.87	B8V	"	"	"	IIaO-E	B	Ly Bgm		Exp slight Slow
							IIaO-E			(Note. There was a big Temp gradient during exp	
							IIaO-E				
19272	3"	5.22	B9III	BC	830/402	"	IIIaJ-E	A	Bln-SB	T=19° Set 522	Ghosts! Arc Deplime Exp slight Fe wk
19172	3"	5.28	B8	"	"	"	"	B	Bln-Shelf	South one	
16062	3"	5.3	F2III	"	1200/507	"	IIaO-E	A	Ly SB	T=18° Set 516	Fe slight Fine
Eyepiece, but too faint; too much haze present to obtain a plate (Lamp sharp, Ha Emission red)											
40426	3"	4.10	B7III	BC	1200/507	BS	IIIaJ-E	B	Bln-Be	T=17° Set 514	Fe slight Fine
10733	3"	5.19	B3V	"	"	"	IIIaJ-E	A	SB Bln	T=17° Fe bright Set 516	Fe slight Fine Sl wk

79

Sat-Sun

Date Mar. 2-3.85 Observers KK-TM

Emulsion Batches:

8" 60° IIaO-E 19103 28025

4½" 60° II-G

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Emulsion
48860	HD 35317	05 18.8	-0 58	18:51	20 00	01 00W	-0 49	F-1	8-8-2	
48860F1	Focus test					"	"	"	10-20	
48860F2	" "					"	"	"	"	
48861	θ Ura. A	09 31.5 1980	+51 46 1980	22 55?	23 04	00 02E	+51 48			
48862	Σ 1371	09 07.7 1900	+53 07 1900	23 11 15	23 21	0 33W	+52 49			
	θ Ura A	09 31.5 1900	+51 46 1980	23 27 25	23 39 30		+51 46			
48863	Praesepe, III 44	08 39.0 1980	+20 04 1980	23 41	23 49	1 35W				
48864	HD 66751	07 59.9	+70 00	00 06	01 59	4 18 W Rotated	+69 46	F1-	4-8-2	
48869 ✓	Spot Calib for	48860, 64				15 mm 15V 3400 UA	4350 U3	4350 U3		

Spectr. Temp. ..+35°F..... Dome Temp./Hum. +30°F/72%.. Transparency Conditions ..cloudy, misty..... 80
Focus .....512.....
Spectr. Temp. ..130..... Dome Temp./Hum. +23°F/85%.....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
1400	3-4"	V 6.11	dF7	PC	120/507	BS	IIaO-E	A	Asn Sp KK	blend of A & C clouds	v wk
				"	"	"	IIIaJ	A		T= 35° ε=150	v v sl blue
				"	"	"	"	B		T= 35° "	cent red
Exp Corr. 0.15		V 3.12		DM Sp Camera			II-G	"A"	6th groove of Ar W in engr pair 3/10th groove	Travel 10, interval 3'8 time temp 29°	
6.3				"			"	B		Travel 30	
				"			"	B	offset -m Σ130	Trail	
6 3, 16			A0	"			"	A		Travel 40	
2,700	3"	V 6.48	dF8	PC	Date 07	K5	IIaO-E	A	Asn Sp KK	Set 54 T: 31° no fog	sl wk
							IIaO-E				
									PH fell apart on unloading		
					but it was dark; I could						
					not into my pocket fast enough without Plexiglass.						

81 Tues-Wed

Date Mar. 5-6/85 Observers B.L.-T.N.

Emulsion Batches:
IIIaJ-E 2911.4 -12025
IIaD-E 1910.3 28025

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
45865	HD 86360	9 52.9	+12 55	22 03	23 25	0 06W	+12 34	Fe/-	13-20-2
45865Tv	Spot Calib	for 45865,68,69,71		15 sec @ D4		3900 (12.5V) 4300 (15V)	4810 (15V)		
45866	HD 72359	8 27.2	+10 24	23 34	01 18	3 24W	+10 11	Fe/-	8-8-
45866T	Spot Calib	for 45866-67,70		15 sec @ 15V		D4 3900	D3 4300 D2 4810		
45867	HD 118216	13 30.3	+37 42	01 24	02 31	0 24E	+37 16	Fe/-	8-10-8
45868	HD 138749	15 25.9	+31 42	02 36	03 18	1 35E	+31 27	"	25-2
45869	HD 137909	15 23.7	+29 27	03 22	03 42	1 06E	+29 11	"	25-2
	Optical Recenter		PS opt	- Lost					
45870	HD 161096	17 38.5	+4 37	04 04	04 16	2 48E	+4 37	Fe/-	12-L
45871	HD 164852	17 58.1	+20 50	04 20	05 42	1 40E	+21 54	"	17-17-1
	Looked at Nova Collinas -				(~ 8.5V mag)			- through haze	

Spectr. Temp. 27°F ..... Dome Temp./Hum. 18°F / 67% Transparency Conditions Ok ... thin cloud ... 82

Focus 520

Spectr. Temp. 18° ..... Dome Temp./Hum. +12° / 88%

Comparison Type/Filter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/ 12-28	20153	3-4"	5.22	B9 IV	BC	830/40.2	BS	IIIaJ-E	A	Bln SB		
								IIIaJ-E				
Fe/ 12-28	20190	3-4"	V 6.23	A0 V	BC	1200/50.7	BS	IIaO-E	B	Ly Pgm	T=-7° Set 512	V sl w k cirr 67T
								IIaO-E				
Fe/ 8-29	17242	3-5"	5.3	F2 IV	BC	1200/50.7	BS	IIaO-E	A	Ly Pgm	T=3° Set 516 Thin cirrus	OK Str
" 12-28	100113	3"	4.10	B7nn	"	"	"	IIIaJ-E	B	Bln Be	T=22° Set 513	sl. stray
" 12-28	20506	3"	3.93 *	F0p	"	"	"	IIIaJ-E	A	KK Asm Sp	T=20° Set=7	fine
									-	* Vsl bright ... thin cirrus Sp *		
Fe/ 12-28	6718	3-4"	3.9	K2 III	BC	1200/50.7	BS	IIaO-E	A	Std Vel		
" 12-28	27332	3"	5.19	B3 IV	"	"	"	IIIaJ-E	B	Bln SB	T=19° Set 513	fine Sl. wk

83

Date WED THUR MAR 6-7 85 Observers R. / BT-R.

8m 68° Emulsion Batches: IIaO-E 19103-28025 ... 187
IIaO-E 19103-03035

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Ex
48872	HD 37776	05 35.9	-01° 32	18 43	19 41	0 43 W	-01° 30	Fe/—	6 6
48872T	SPOT CAL FOR PLATES 48872-74			15 MIN @ 15 VOLTS		① D4 3900 ② D3 4300 ③ D2 4800			
48873	HD 36485	05 26.9	-00° 22	19:43	20:44	01 45 W	-00° 14	Fe/—	6 6
48874	ADS 4241 D	05 33.7	-02° 39'	20:50	21:50	02 54 W	-02° 35	Fe/—	6-6
48874F	FOCUS TEST							Fe/—	20
48875	HD 66751	07 59 9	+70° 0'	22:07	23 45	2 10 W	+69° 48	Fe/—	9-3
48875T	SPOT CAL FOR PLATES 48875-76			15 MIN @ 15 VOLTS		① D4 3900 ② D3 4300 ③ D2 4800			
48876	HD 119228	13 36.9	+55° 11	23. 55	00 40	2 16 E	+54 45	Fe/—	9-1
48876F	FOCUS TEST							Fe/—	20-2

Spectr. Temp. +28°F ..... Dome Temp./Hum. -05°C 47% Transparency Conditions ... Sc. excellent until ... 84 the cloud came

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2000	1-2	6.83	B II	B.C.	830/40.2	B.S.	IIaO-E IIaO-E	A	Bln - HeRich	F: 519	Fine
3000	2	6.7	B II$_p$	B.C.	830/40.2	B.S.	IIaO-E	B	Bln/He Rich	9: 28°F F: 519	Fe sl sh Fine
4000	2	6.4	B II	"	"	"	"	A	VB-Bln	9: 28°F F: 519	Fine
				"	"	"	IIaO-E	B		9: 27 F: 519	cont red
8201	2-3	V 6.48	dF8	B.C.	1200/50.7	B.S.	IIaO-E IIaO-E	A	KK Hom Sp	9: 27°F F: 515	fine
1755		6.30	MgIIab BaO7:	BC	1200/50.7	BS	IIaO-E	B	Archive	9: 27°F F: 511	sl wk
								B		9: 26°F "	sl blue

85 Fri-Sat

Date Mar. 8-9/55 Observers BT-RI

R: Mira 4½min @ 68°F in D19 Emulsion Batches: IIaJ.E. 29114-12025

R: Mira 1/8 min @ 68°F in D4 IIaO.E. 19103-03035

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp	Exp. Mtr
48877	HD86360	9 52.9	+12 55	23 09	23 59	0 52W	+12 32	Fel-	17-17	30002
43877T	SPOT CALN FOR PLATES 48877-				15 min @ D4	①17.5V 3900	③15V 4300	③15V 4810		
48878	HD118216	13 30.3	+37 42	00 05	01 09	1 35E	+37 17	Fel-	7-9	30000
43878T	SPOT CALN FOR PLATES 48878-				15 min @ 15 units	①D4 3900	②D3 4300	③D2 4810		
48879	HD119228	13 36.9	+55 11	01 15	02 14	0 36E	+54 48	Fel-	9.7-9	15002
48880	HD137909	15 23.7	+29 27	02 19	02 34	2 02E	+29 11	"	25-2	30001
48881	HD135749	15 28.9	+31 42	02 39	02 52	1 49E	+31 27	"	25-2	15019
48882	HD141992	15 46.9	+21 17	02 56	04 02	0 58E	+21 04	"	9-9	15006
48883	HD164852	17 58.1	+20 50	04 07	05 27*	1 49E	+20 54	"	18-3	30005
48884	HD156014	17 10.1	+14 30	05 48	06 01	0 21E	+14 27	"	14-14	16014
48885	HD146051	16 9.1	-3 26	06 05	06 16	0 54W	-3 35	"	14	16016
43885F	Focus TEST							Fel-	20-21	

* A

Spectr. Temp. ..... Dome Temp./Hum. 0°C / 89% Transparency Conditions ... Good ... 80

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. -4°C / 86%

Comparison Type/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/- 17	20002	5"	5.22	B9IV	BC	1200/50.7	BS	IIIaJ-E	1	Bin SB	T=40°F F=511	
								IIaJ-Ef				
Fe/- 1	20000		5.3	F2IV	B.C.	1200/507	B.S.	JIaO-E	B	Ly SB	BROKEN 2 PIECES 9=39°F F=508	
								JIaO-E				
Fe/- 9	10002	4"-5"	6.30	MeIIIab Ba0.7:	BC	1200/507	BS	IIaO-E	A	Archive	9=38°F F=512	Fine
" 25	20001	3"-4"	3.93	Fop	"	"	"	IIIaJ-EF	B	KK Asm Sp	9=37°F F=508	Fine
12	20019		4.10	B7nn	"	"	"	IIIaJ-EF	A	Bin Be	9=36°F F=512	
" 9	10000		6.30	K4.5III	"	"	"	IIaO-E	B	Archive	T=36°F F=509	Fe vel: Fine
" 16	20005	3"-4"	5.19	B3IV	"	"	"	IIIaJ-E	A	Bin SB	9=35° F=512	
" 14	10014		4.92	M3Ib-II	"	"	"	IIaO-E	B	Archive	9=33°F F=509	Fine
" 17	10012		3.32	M0.5III	"	"	"	"	A	Archive	9=33°F F=513	Fe sl sht Fine
Fe/- 25								"	B		9=" "	cont/red
	* Fe arc problem delayed final comparison until 05 42											

87

SAT SUN

RI MAR 18 MIN @ 68° FOR DA

Emulsion Batches: Kodak 103-0E

Date MAR. 9/10 1985 Observers BT-RI

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
	POCKET SPECT.			19:00	20:14				
48886	HD 23862	3 43.2	+23 50	20 34	21 03	4 09W	+24 10	Fel.	9-9
48887	HD 65041	7 51.7	+43 47	21 05	22 18	1 15W	+43 37	"	9-9
48887T ✓	SPOT CHK FOR PLATES 48886-				15 MIN @ 15 VOLTS		① D4 3900 ② D3 4300 ③ D2 4810		
48888	HD 89449	10 14.3	+19 59	22 23	22 53	0 31E	+19 35	Fel	9-9
48889	HD 113996	13 2.4	+28 10	22 59	00 21	1 52E	+27 45	"	9-9
48890	HD 118216	13 30.3	+37 42	00 29	01 08	1 31E	+37 18	"	9-9
48891	HD 112142	12 49.2	-9 00	01 14	02 48	0 49W	-9 29	"	9-9
48892	HD 142574	15 50.2	+20 36	02 53	04 39	0 19E	+20 23	"	9-9
48893	HD 133124	14 57.7	+25 24	04 43	05 43	1 36W	+25 06	"	9-9
48894 ✓	HD 146051	16 09.1	-3 26	05 47	05 58	0 39W	-3 37	"	14
48894F	FOCUS TEST		NO STELLAR	FORGET TO MOVE	ARCHER			"	25-21

Spectr. Temp. ..... Dome Temp./Hum. +02°C/ 57% Transparency Conditions hazy with some passing clouds 88

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. -2°C/94%

Comparison Type	Filter	Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe		0.9	10046	2-3	5.01	B8	BC	1200/ 50.7	B5	IIaO-E	A	Gry Pgm	T=37°F F=512	Fine
"		4.9	8040	3-4	6.87	B2V	"	"	"	"	B	Ly Pgm	T=37°F F=508	
										IIaO-E				
Fe		9.1	8001		5.3	F6IV	BC	1200/507	B5	IIaO-E	A	Std Vel	some clouds T=36°F F=512	
"		4.1	10002		6.28	K5III	"	"	"	"	B	Archive	some clouds T=36°F F=509	Fe str wk Fine
		9.9	20000	2-3	5.3	F2IV	"	"	"	"	A	Ly SB	T=35.5°F F=512	
		4.2	10000		6.39	M3III Ca-1	"	"	"	"	B	Archive	T=35°F F=509	Fine
		9.2	10000	2-3	7.03	M0III	"	"	"	"	A	Archive	T=34°F F=513	
		4.2	10001		6.31	K4III Ca0.5	"	"	"	"	B	Archive	T=34°F F=509	Fine
			10000		4.3	M0.5III	"	"	"	"	A	Std Vel	T=33°F F=513	
		1.2					"	"	"	"	A		" "	discard

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Date SUN. MON. MAR. 10-11/85 Observers ..Kly.-Rill.St-R...

Emulsion Batches:

R MAR 11 8min @ 68°F IIaO-E 19103-08035
R MAR 11 4½min @ 68°F IIIaJ 29114-12025
R MAR 11 8min @ 68°F IIaO-E 19103-10035

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp	Expl. Mtr.
48895F	Focus TEST							Fe/-	25-25	
48895	HD 35410	05 19.4	-0°59	18:45	19 20	0053W	-00°52'	Fe/-	9-1	
48896	HD 29316	4 32.0	+53 17	19:26	19 49	20 7W ① D4	+53 31 ② P3	" ③ P4	8-2-2	
48896T	SPOT CALN FOR PLATES 48895-96, 99				15 MIN @ 15 VOLTS	3900	4300	4810		
48897	HD 47105	6 31.9	+16 25	19 53	19 56	0016W	+16 27	Fe/-	25-2	
48898	HD 56986	7 14.1	+22 10	20 01	20 13	0010E	+22 03	"	25-2	
48899	HD 66751	7 59.9	+70 00	20 18	21 42	0030W ① 19.5V	+69 48 ② 15V ③ 15V	"	8-8-	
48899T	SPOT CALN FOR PLATES 48897-98				15 MIN @ 04	3900	4300	4810		
48900	HD 76644	8 52.4	+48 26	21 46	2154	0037E	+48 08		25-2	
48901	HD 76095	8 49.0	+26 36	22 58	0057	301W ① D4	+26 17 ② D3	Fe/- ③ P2	8-8-	
48901T	SPOT CALN FOR PLATES 48901-				15 MIN @ 15 VOLTS	3900	4300	4010		
48902	HD 137909	15 23.7	+29 27	01 04			+29 11	Fe/-	25	

Unable to complete exposure due to clouds

Spectr. Temp. 41°F Dome Temp./Hum. +04°C / 58% Transparency Conditions Sl. hazy, thin clouds 90

Focus 5.11

Spectr. Temp. ..... Dome Temp./Hum. +02°C / 80%

Comparison Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/-					B.C	1200/50.7	B.S.	IIaO-E*	A		q = 41°F F = 511	OK
Fe/-	7000	3	5.2	KoIII	B.C.	1200/50.7	B.S.	IIaO-E*	A	STDVEL	" "	
	5000	2	V= 5.36	A5n	"	"	"	IIaO-E*	B	KKAsmSp	T=42°F F=507	Fe slwk Fine
								IIaO-E*			T= 42	
	5000	2	1.9	AOIV	BC	1200/567	BS	IIIaj-EB	A	KKAsmSp	T=42 F=511	Fe slwk Fine
	5000	1"-2"	3.9	FoIV	BC	"	BS	"	B	"	T=42 F=507	Fe slwk Fine
	9000	1-2"	V= 6.48	dF8	"	"	"	IIaO-E*	A	"	" 50M² (2000)S F=511	Fine
								IIIaF+				
	2500	2"	3.32	A5	B.C.	1200/50.7	B.S.	"	B	KKAsmSp	q = 42 F=507	Fe slwk Fine
Fe/-	6000	2-3-5	V= 7.1	GO	BC	"	"	IIaO-E	A	"	" 511	slwk
								IIaO-E				
Fe/-		~5"	3.93	FOp	BC	1200/50.7	BS	IIIaJ-E	B	KKAsmSp	T=48°F F=507	

91 Tues-Wed Tn Dev. 8 mi - 25 8° F Mar 14

Date Mar. 12-13/85. Observers BT-RI

Emulsion Batches: 4a O E 19103 - 10235

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48902	HD118216	13 30.3	+37 42	00 13	01 18	1 10E	+37 20	Fe/-	8-8-8
48902T	SPOT CALN FOR PLATES 48902-06				15 MIN @ 15 VOLTS	DL 3900	D2 4300	D2 4810	
48903	HD141477	15 44.2	+18 27	01 23	02 27	2 14E	+18 13	Fe/-	8-8-8
48904	HD148783	16 25.4	+42 06	02 32	03 54	1 27E	+41 57	"	8-8-8
48905	HD149161	16 27.9	+11 42	03 58	05 32	0 06W	+11 34	"	8-8-8
48906	HD163917	17 53.5	-9 46	05 36	05 59	0 54E	-9 42	"	8-8-8
48906F1	Focus Test							Fe/-	25-25
	Focus test done Mar 14/Tn			Dome Temp +34° F					
48906F2	with	shim between PH's		Yoke	"	0 0	-2° 0	Fe/-	25-20
48906F3	"	"	"	"	"	"	"	"	
48906F4	Normal					"	"	"	20-20
48906F5	"					"	"	"	

Spectr. Temp. ..... Dome Temp./Hum. 0°C/54% Transparency Conditions ..... 92..

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. -1°C/52%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
00001	3"-4"	5.3	F2IV	BC	1200/50.7	BS	IIaO-E	A	Ly SB	T=38°F F=512	Fine
							IIaO-E				
10000		5.71	M0.5IIIa6	BC	1200/50.7	BS	IIaO-E	B	Archive	T=37°F F=508	Fine
10001		6.56	M6III	"	"	"	"	A	Archive	T=37°F F=512	Fine
10000	3"-5"	6.33	K7III	"	"	"	"	B	Archive	T=36°F F=509	Fine
10004		3.66	K0III aCN-1	"	"	"	"	A	Archive	T=35°F F=512	Fine
				"	"	"	"	A		T=35°F F=512	OK
				BC	1200/50.7	BS	IIaO	A		T=40°F Set 510	blue
							"	B		" " V	blue
							"	A		" " S1	blue
							"	B		" "	Fair

93 Fri/Sat.

Date Mar.15-16.1985 Observers Ly-Tn//Bt-Tn

Emulsion Batches:
II aO-E 19103 -10035 'A'
III aU-E 29014 -22025

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48907	HD65041	07 51.7	+43 47	18:57	21:08	00 25W	+43 35	F/—	8-8-8
48908	HD44990	06 19.8	+07 08	21:13	22:47	03 40W	+ 708	F/—	11-6-8
48908T	Spot Calib for 48907-09				15min 15V	D4 3900	D3 4300	F2 4200	
48909	HD72359	08 27.2	+10 24	22:53	00 16	3 03 W	+10 11	F/—	8-8-8
48910	HD56360	9 52.9	+12 55	00 20	01 28	2 49W	+12 33	"	20 20
48911	HD115216	13 30.3	+37 42	01 34	02 14	0 02E	+37 19	"	8-8-
48912	HD138749	15 28.9	+31 42	02 18	03 05	1 01E	+31 26	"	28 8
48912T	Spot Calib for 48910,12				15min D4	17.5V 3900	15V 4300	15V 4810	

Spectr. T
Focus
Spectr. T
Exp Mtr

Spectr. Temp. 33°F ..... Dome Temp./Hum. -2°C/60% Transparency Conditions Fine - s/cloudy - cloudy 94

Focus 514 .....

Spectr. Temp. 24°F ..... Dome Temp./Hum. -6C/90%

Comparison Type/Filter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	155	5"	6 7	B2V	BC	1200/50.7	BS	IIaO E	A	SB - Ly		
	4737	4-5"	~6	F Tab	"	"	"	"	B	Rim Coph	→ 31°F Set 511	
								"		Extra	oscillation @ 03 35 W	
	5445	3"	6.2	A0V	BC	1200/50.7	BS	"	A	SB - Ly	28° F Set 514	
	30005	2"	5.22	B9V	"	"	"	IIIaJ-E	B	SB Bln	26°f 512	
	18268	2-3"	5.3	F2V	"	"	BS	IIaO E	A	SB Ly	some cloud 25° 515	
	9655	2"	4.10	B7III	"	"	"	IIIaJ-E	B	Be Bln	25°F Set 512 cloud	
								IIIaJ-E				

95

Date Sunset Mar 17-18/85 Observers Kly-Tn // Bt-Tn

Emulsion Batches:
5"68° IIIaJ Eb 29014 - 20275
8"68° IIaO-E 19103 - 19915

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48913	HD 29316	4 32.0	+53 17	19 04	20 47	0334W	+53°30'	Fe/-	20-20
48914	HD 47105	6 31.9	+16 29	20 52	20 55	144W	+16 30	"	27
48915	HD 56986	7 14.1	+22 10	21 00	21 16	122W	+22 06	"	30-30
48915T	Spot Cals	for 48913	-15		15 min @ 04	17.5V 3900	15V 4300	15V 4810	
48916	HD 66751	7 59.9	+70°0'	21 21	23 25	241W	76 52	Fe/-	8
48916T	Spot Cals	for 48916	-18,		15 min @ 15V	D4 3900	D3 4300	D2 4810	
48917	HD 95735	10 57.1	+36 58	23 32	00 04	W		Fe/-	6
48917	HD139862	15 35.4	+12 23	00 08	03 11	102E	+12 07	Fe/-	6-8
48918	HD148349	16 22.3	-7 22	03 17	05 50	050W	-7 30	"	6-8
48918F	Focus					0 0	"	"	30

Spectr. Temp. 32°F Dome Temp./Hum 20°F / 70% Transparency Conditions Clear 96

Focus 513 (windy)

Spectr. Temp. 17°F Dome Temp./Hum +9°F / 70%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe 4000	4"	V= 5.8	A5n	B.C.	1200/ 50.7	BS	IIIaj-cb	A	KKAsmSp	5	good
" 1000	4"	1.9	A0V	"	"	"	"	B	"	25° Sel	good
" 7000	2-3"	3.9	F0IV	"	"	"	"	A	"	25° F= 515	good
							IIIa				
5,700	2-3"	V= 6.5	dF8	BC	1200/ 3.7	BS	IIaO-E	A	KK AsmSp		VS/wk
							IIaO-E				
	2-3"	V= 7.6	Mb	BC	830/ 40°E	BS	IIaO-E	A	KKAsmSp	Too faint to scan, bad	
Fe 5050	2-5"	7.19	G7.5IIIaCN-1 Fe0.5	BC	830/40J	BS	IIaO-E	A	Archive	22° F=522	triple flare! Fe str-
" 5507	5"	6.95	M2SIII	"	"	"	"	A	Archive	19° F=523	Fine
							IIaO	A		17° F=523	good
									IIIa ... 2005 you?		
							—				

97

Mon-Tues

Date Nov. 19/55 Observers BT-Tu

Emulsion Batches:
8" 68° IIaO-E 19103-10035 "B"
5" 68° IIIaJ-E 29014-32025

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48919	HD20902	3 17.3	+49 30	19 15	19 18	3 24W	+49 53	Fe/-	11-11
48920	HD21770	3 25.5	+45 43	19 23	19 53	3 52 W	+46 04	"	6-12
48920T ✓	Spot Calk for 48919	-23			15 min @	D4 15V 3400	D3 4300	D2 4810	
48921	HD23862	3 43.2	+23 50	20 02	20 14	3 54W	+24 07	Fe/-	12-12
48922	HD58009	10 3.7	+19 01	20 21	23 04	0 26W	+18 38	"	8-8
48923	HD95735	10 57.9	+36 35	23 14	00 45	1 12W	+36 08	"	6-6
48924	HD135749	15 28.9	+31 42	02 30	03 27	0 35E	+31 26	"	19-20
48925	HD137909	15 23.7	+29 27	03 34	03 44	0 13E	+29 11	"	30-30
48926	HD164852	17 58.1	+20 50	03 49	04 43	1 32E (X)	+20 52	"	20-20
48926T ✓	Spot Calk for 48924-26.				15 min @	D4 17.5V 3900	15V 4300	15V 4810	
48927	HD167006	18 8.1	+31 23	04 47	05 38	1 03E	+31 27	Fe/-	8-8
48928	HD161096	17 38.5	+4 37	05 42	05 47	0 25E	+4 34	Fe/-	11-11

Spectr. Temp. ..28°f..... Dome Temp./Hum. -5°C/55% Transparency Conditions . Fine...Cloudy....98.

Focus .....

Spectr. Temp. ..26°f..... Dome Temp./Hum. -5°C/90%. was colder at Ohts

Comparison Type Filter Exp	Exp. Mtr. AIN=2500	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fel- 11"	12306	1"	2.27	F5I6	BC	1200/50.7	#150μ	IIaO-E	A	also std vel. rG Pgm	* Longest length 19-1.2m2 slit optics is F514	
" 6"	12075	1"	5.71	F4III	"	"	"	"	A	rG Pgm	F515	
								"		had to cut slice off to make f.f		
Fel- 12"	5494	1"	5.01	B8	BC	1200/50.7	BS	IIaO-E	A	Gry Pgm	T=26°F F=515	Fe sl st Fine
" 8"	8034	.5"	V 7.59	G8III CN1	"	"	"	"	A	Archive	25°f "	fine
" 6"	1634	.5"	V 7.60	M6	"	830/40.2	"	"	A	KK Asm Sp	T=24°F F=520 clouds	good
" 10"	45355	.5"	4.10	B7nn	"	1200/50.7	"	IIIaJ-E	A	Bln Be	T=25°F F=515	sl. str. Fine
" 30"	27398	.5"	3.93	F0p	"	"	"	IIIaJ-E	A	KK Asm Sp	" "	fine comp sl ate
" 20"	40253	.5"	5.19	B3IV	"	"	"	"	A	Bln SB	" "	
								IIIaJ-E				
Fel- 8"	9512		6.62	M3III	BC	1200/50.7	BS	IIaO-E	A	Archive		fine
" 10"	5511		3.9	K2III	"	"	"	"	A	std vel		
										Note - These IIIaJs are for tomorrow. They flop in BC.		

99 Tues-Wed

Date Mar. 19-20/55 Observers BT-Tn

Emulsion Batches:

8m 68s IIaO-E 19103 -15035

5m 68s IIaJ-E 29014 -22025

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Ex
✓ 48929	HD44131	6 15.0	-2 54	19 06	20 03	1 17 W	-2 54	Fe/-	11-1
48930	HD65041	7 51.7	+43 47	20 09	21 55	1 30W	+43 36	"	8-8-
48930 T✓	Spot Calib	for 48929 -31,34,	36,37			15 min @15V	D4 3900	D7 4300	D5 4100
48931	HD72359	8 27.2	+10 24	22 00	22 55	1 56 W	+10 09	Fe/-	8 8
48932	HD86360	9 52.9	+12 55	22 59	00 15	1 51 W	+12 33	"	20-21
48933	HD112028	12 48.3	+83 58	00 26	01 46	0 29 W	+8332	"	20-21
48933 T✓	Spot Calib	for 48932	-33,35			15 min @ 17.5V DA 3900	15V 4300	17.5V 4100	
48934	HD118216	13 30.3	+37 42	01 54	02 23	0 22W	+37 12	Fe/-	8-8-
48935	HD137909	15 23.7	+29 27	02 36	02 49	1 05E	+29 11	"	30-3
48936	HD154143	16 58.5	+14 14	02 53	04 04	1 24E	+14 08	"	8-8-
Observed Nova Collins and planned to obtain its spectrum but threat									
48937	HD192713	20 11.2	+23 12	04 26	05 41	3 00E	+23 31	Fe/-	6-6

Spectr. Temp. ..... Dome Temp./Hum. 34°F/82% Transparency Conditions hazy 100

Focus .....

Spectr. Temp. 35° f Dome Temp./Hum. 30°/98?

1st plate broken 1pc saved

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
4[illegible]3	1"	5.2	gM1	BC	1200/50.7	BS	IIaO-E	A	Std Vel	*BScat 5°,35 B=6.15 T=39°F F=512 s[illegible]	wk
8339	1"	6.57	B2V	"	"	"	"	A	Ly Pgm	"	fine
							IIaO-E				
6971	1"	6.2	A0V	BC	1200/50.7	BS	IIaO-E	A	Ly Pgm	T=38°f F=512	fine
30[illegible]36	<1"	5.22	B9IV	"	1200/50.7	"	IIIaJ-E	A	Bln SB		Fe slwk fine
35109	2"	5.28	B8	"	1200/48	"	"	A	Bln Shell		fine
							IIIaJ-E				
16066	<1"	5.3	F2IV	BC	[illegible]/50.7	BS	IIaO-E	A	Ly SB	T=35°f F=513	fine
25532	1"	3.93	F0p	"	"	"	IIIaJ-E	A	KK Asm Sp	"	Fe wk fine
9625	1"	6.58	M3III	"	"	"	IIaO-E	A	Archive	"	fine
but thr[illegible]ing clouds would make the exposure too, too slow.											
8642	2"	6.2	G3IbII	BC	830/40.2	BS	IIaO-E	A	Fe Pgm	22 Vul thin cloud thick cloud at end	fair

101 Wed-Thurs

Date Mar. 20-21/85 Observers BT-TN

Cm 680

Emulsion Batches: IIaO.E. 19103 - 18033

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp	Exp. Mtr.
48938F	Focus					0 0	+15	Fe/-	40-40	
48938	HD26015	4 02.0	+14 54	19 04	20 22	3 52 W	+15 09	Fe/-	8-8-8	2005
48939	HD46150	6 26.6	+5 00	20 28	22 05	3 11 W	+4 58	"	8-8-8	2011
48940	HD65041	7 51.7	+43 47	22 10	23 45	3 25 W	+43 36	"	8-8-8	5024
48941	HD103095	11 47.2	+38 26	23 50	01 30	1 15 W (D4 / D3)	+37 52 (D7)	"	8-8-8	5010
48941T	Spot Calib for	48941-42			15 min @ 15V	3140	4300	4710		
48942	HD128220	14 30.6	+19 39	01 42	05 02	2 06 W	+19 21	Fe/-	6-6-6	4011
48943	HD157999	17 21.5	+4 14	05 07	05 46	0 02 W	+4 11	"	6-6-6	6166

Spectr. Temp. ..... Dome Temp./Hum. 26°F/60% Transparency Conditions Fine 102

Focus .....

Spectr. Temp. 26°C Dome Temp./Hum. 22°F/80%

Comparison Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe					BC	1200/50.7	BS	IIaJ	A		T=36°F F=513	v sl red
Fe	.005	3"-4"	6.41	F3V	BC	1200/50.7	BS	IIaO-E	A	Archive	Oscillat. S 3'40W	v sl wk
	.017		6.60	G6fVe	"	"	"	"	A	Archive		fine
"	.3024	2"-3"	6.87	K2V	"	"	"	"	A	Ly SB	T=30°F F=514	v sl wk
"	.5010	2-3"	7.20	G8VI	"	"	"	"	A	KK Asm Sp	"	Re sl wk fine
								"				
Fe	.4011	2"	V 8.54	sd09 +gG0	BC	830/40.2	BS	IIaO-E	A	Ly SB	Comet see on TV T=27° F=520	Fe wk sl wk
"	.3760	1-2"	5.84	K2III	"	"	"	"	A	Archive	T=26° "	Re v sl wk fine

103 Thurs / Fri

Date Mar. 21-22/85 Observers L_g - T_m

8"68° Emulsion Batches: IIaO-E 19103 - 20035 IIIa-J ef 29019 - 06035

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48944	HD 44790	06 17.8	+07 08	19:03	20:57	0 21 W	+07 08	Fe/-	8-8½
48944T	√Spec. Cal. for 48944-46, 48-50			15 min. 15V		12A	D2	02	
48945	HDE 5041	07 51.7	+43 47	21:02	22 16	1 58 W	+ ——	Fe/-	8-8½
48946	HD 72359	08 27.2	+10 24	22 22	23 12	2 20 W	+10 11	"	8-8½
48947	HD 86260	09 52.9	+12 55	23 16	00 18	2 01 W	+12 30	"	20 min
48948	HD 113216	13 30.3	+37 42	00 22	00 49	1 04 E	+37 18	"	7-8
48949	HD 128220	14 30.6	+19 39	00 56	04 27	1 35 W	+19 21	Fe/-	6-6
48950	Nova Vul (Cal. Std.)	20 22.8	+27 30	04 34	05 31	3 12 E	+27 52	Fe/-	6-6

Spectr. Temp. 34°F ..... Dome Temp./Hum. +30°F / 54% Transparency Conditions Sl. hazy 104

Focus ..... 513 .....

Spectr. Temp. ..... Dome Temp./Hum. +22°F / 90%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
6015	1-2"	6	F7 Ib	BC	1200/507	BS	IIaO-E	A	Bm Cyg - Ly		fine
							IIaO-E				
9134	1-2"	6.9	B2 II	BC	1200/507	BS	IIaO E	A	SD - Ly	T - 33°F Sel 513	fine
8100	"	6.2	A0 V	"	"	"	IIaO-E	A	SB - Ly	T - 32°F Sel 514	fine
3200	"	5.2	B9 IV	"	"	"	IIIaJ-O	A	SD - Bl	"	fine str's OK
16720	1"	5.3	F2 IV	"	"	"	IIaO-E	A	SE - Ly	T - 31°F "	
4185	1"	8.5	G4 + G0	"	530/602	"	IIaO-E	A	SB - Ly	T - 30°F Sel 518	slwk
2480	1-2"	9.5	Em	"	"	"	"	A	Nova	* no Exp meas. filter T - 28°F Sel 519	wk H emission only

105 Fri/Sat

Date Nov 22/23 1935 Observers Ly-Th/Bt-Th

Emulsion Batches:
8" 103a-E 19103 — 20045
103a-E 19097 01035

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp	Exp. Mtr.
48951	HD39743	05 49.4	+49 01	19.31	21 21	03 09 W	+49 05	Fe/-	8-88	6[illegible]
48951T	Spot Cal'n for 48951-56				15 min @	15V 3900 D4	4300 D3	1800 D2		
48952	HD47105	06 31.9	+16 29	21 25	21:28	02 34 W		Fe/-	11-11	2[illegible]
48953	HD65041	07 51.7	+43 47	21:33	20 42	02 30 W	+43 35	Fe/-	8-9-	9053
48954	HD72357	08 27.2	+10 24	22 46	23 47	3 00 W	+10 11	Fe/-	[illegible]	8[illegible]
48955	HD122742	13 58.6	+11 16	23 52	02 43	0 25 W	+10 56	"	8-8-	801
48956	HD137909	15 23.7	+29 27	02 46	02 57	1 16 E	+29 12	"	12-1	8503
48957	HD159561	17 30.3	+12 38	03 02	03 17	2 31 E	-12 36	"	28-2	25836
48957T	Spot Cal'n for 48957, 47, 65,				15 min	17.5V 04 3900	15V 2300	15V 4810		
48958	HD161096	17 38.5	+4 37	03 24	03 49	2 07 E	+4 38	Fe/-	12-	7626

Spectr. Temp. 37°F Dome Temp./Hum. 32°F / 50% Transparency Conditions ... light ... cirrus ... 106.

Focus 514

Spectr. Temp. 32°F Dome Temp./Hum. 32°F / 55%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
6469	<1	6.8	G8 III	BC	1200/50.7	BS	IIaO-e	A	A+K-L	some cloud	fine
							IIaO-e				
8140	1"	1.9	A0 III	BC	1200/50.7	BS	IIaO-e	A	Atm+K	cloud	fine
9053	1"	6.9	B2 V	"	"	"	"	A	SB-L	some cloud	fine
8053	1-2	1.2	A0 V	"	"	"	"	A	SB-L		fine
8011	1"	6.8	G8 V	"	"	"	"	A	KK Atm Sp	cloud	fine
8503	"	3.93	F0p	"	"	"	"	A	KK Atm Sp		fine
25836	"	2.2	A5 III	"	"	"	IIIaJ-E	A	KK Atm Sp		fine
							IIIaJ-E				
7626	="	3.9	K2 III	"	"	"	IIaO-E	A	Std Vel	cloud	fine

107 Sun/Mon

Date Mar 24/25 1985 Observers Ly-Tn

Emulsion Batches: IIa-O-e 19103 22035

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp Mtr.
48959	HD39743	05 49.4	+49 01	19:30	22:05	4 02W	+49 03	Fe/—	8-10-8	4330
48959T	Spect Calib for 48959-61				15 min @ 15V		D4 3400 D3 4300			
48960	HD81104	09 18.6	+54 28	22:10	01 35	4 04W	+54 08	Fe/—	7-9-8	3974
48961	HD137909	15 ~~23.7~~ 23.7 Tn	+29 27	01:45	02.00	1 34E	+29 13	Fe/—	12-12	8100

Spectr. Temp. 39°F Dome Temp./Hum. +34?/60?

Focus 511.5

Spectr. Temp. Dome Temp./Hum. +30?/60?

Transparency Conditions hazy - cloudy 108

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
4330	1-½	6.8	G&II	BC	1200/5007	BS	IIaOe	A	H+K-Ly	hazy - Moon'ish sky	
							IIaD-e				
3974	1"-3"	7.42	A2	BC	1200/5007	BS	IIaOe	A	5B-Bl	3000 before cloudy 0"->01" ESTIcam after	½ good
8100	2	3.9	FOq	"	"	"	"	A	Ast-KK	35°F Set 513	fair

109 Mon-Tues

Date Mar. 25:26/55 Observers BH-TM

Emulsion Batches:
IIaO-E 19103 -22=25
5m 68 IIIaJ-E 29014 =06035

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
48962	HD23862	3 43.2	+23 50	19 08	19 23	3 32 W	+24 09	Fe/-	C-8-8	8162
48963	HD40535	5 54.3	-9 23	19 29	20 54	2 58 W	-9 21	"	8-8-8	8019
48963T	Spot Cals for 48962-64, 66-69					15m. @ 15V 3				
48964	HD66751	7 59.9	+70 0	21 06	22 51	2 38 W	+69 52	Fe/-	8-8-8	8019
48965	HD86360	9 52.9	+12 55	22 57	00 26	2 27 W	+12 35	"	20-20-20	2166
48966	HD103095	11 47.2	+38 26	00 31	02 26	2 32 W	+37 52	"	8-8-8	0402
48967	HD157452	17 18.5	+40 04	02 31	09 11	1 12 E	+40 03	"	8-8-8	16040
48968	HD165720	18 16.1	+21 55	04 15	05 15	1 0E	+22 02	"	12-12	9400
48969	HD161096	17 38.5	+4 37	05 20	05 26	0 17E	+4 38	"	12-12	125
48967F						0 0	"		20-20	

Spectr. Temp. +37°F ..... Dome Temp./Hum. 30°F/51% Transparency Conditions Fine - thin haze only 110.

Focus 513 .....

Spectr. Temp. 30°F ..... Dome Temp./Hum. 25°F/70%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
8162	2"	5.01	B8	BC	1200/507	BS	IIaO-E	A	Gry Pgm		Fair to Fine
8019	2"	6.41	F2IV	"	"	"	"	A	Archive		fine
							"				
8019	2"-3" V	6.48	dF8	BC	1200/50.7	BS	IIaO-E	A	KK Asm Sp	T=35°	
25166	2"-4"	5.22	B9IV	"	"	"	IIIaJ-E	A	Bln SB	T=32°F F=514	fine
8402	2"-3"	7.20	G8VI	"	"	"	IIaO-E	A	KK Asm Sp		
16090	2"	6.22	dF8	"	"	"	"	A	Bln SB	getting hazy	fine
9000	1"-2"	6.54	M1III	"	"	"	"	A	Archive	T=30°F	fine
16-3		3.9	K2III	"	"	"	"	A	Std Vel		
				"	"	"	IIaO	A		T=30° Exp 574	
				"							
				KK-	Do both III aJ Exp boxes together, as one bar						
					has only 1 strip so no 4+5 from N=21-22 Tn						

111 Two-Hour

Date Mar. 26-27/25 Observers Kly-Tr // Bt-Tr

Emulsion Batches:
8m 68° IIaO-E 19103 – 22135
4½m 68° IIa-E 29014 – [illegible]

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48970	HD 47105	6 31.9	+16 29	19h 11m	19 14	0 37W	~	[illegible]	[illegible]
48971	HD 66751	7 59.9	+70° 0'	19 24	20 35	00 26W	+69 48	"	6-8
48970T	Spot Cal for 48970, 75-79				15 min @ 15V D4 3900	17.5V	15V		
48972	HD 76095	8 49.0	+26 36	20 46	22 25	1 32W	+26 17	Fc/WG	6-8
48972T	Spot Cal for 48971-74				15 min @ 15V	D4 3900	D3 4300		
48973	HD 103095	11 47.2	+38 26	22 32	23 34	017E	+37 52	Fc/WG	6-8-6
45974	HD 122742	13 58.6	+11 16	00 43	02 44	0 16E	+10 54	"	8-8-8
45975	HD 138749	15 28.9	+31 42	02 48	03 15	0 15E	+31 28	"	17-17-17
45976	HD 164552	17 58.1	+20 50	03 19	04 35	1 25E	+20 52	"	17-17-17
45977	HD 137909	15 23.7	+29 27	04 40	04 56	1 31W	+	"	25-25
45978	HD 159561	17 30.3	+12 38	05 00	05 04	0 29E		"	25-25
45979	HD 161096	17 38.5	+4 37	05 08	05 31	0 09E		"	25-25

Spectr. Temp. 41°F Dome Temp./Hum. 39°/54% Transparency Conditions hazy/ → cloudy 1.12.

Focus 511

Spectr. Temp. 39.9°F Dome Temp./Hum. 43°F/85%

New D19 for IIIaJs

adj Fe Arc before starting

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2 @ 60	<1"	1.9	A3 Tr	BC	1200/ 5-7	BS	IIIaj-E	A	KKAsmSp	-	Fe wk fine
5200	<1"	1" Ind	dF8	"	"	"	IIaO-E	A	"		fine
							IIIaj E				
9000	1"	1" 66	GO	BC	1200/ 5-7	BS	IIaJ E	H	FeFlmSp		fine
							IIaO-E				
4541	<1-2"	7.2	G8III	BC	1200/ 5-7	BS	"	A	KKAsmSp	some cirrus T=41° Set 511	
8040	2-3"	6.8	G8IV	"	"	"	IIaO-E	A	KK Asm Sp	" "	fe fine fine
45158	2"	4.10	B7III	"	"	"	IIIaJ-E	A	B7III Be	" "	Fe wk fine
35897	6-2"	5.19	B3IV	"	"	"	IIIaJ-E	A	B7III SB	T=40°F "	fe/wk fine
25708	3"	3.93	F0p	"	"	"	IIIaJ-E	A	KK Asm Sp	" "	fe/wk fine
25551	3"	2.2	A5III	"	"	"	IIIaJ-E	A	KK Asm Sp		Fe wk fine
9479	3-5"	3.9	K2III	"	"	"	IIIaJ-E	A	Std Vel	T=40°F cloud Set 511	Fe wk fine
					KK - Only		5 IIIaJs - 2 set in dome vacuum.				

1B Tue/Wed

Date 4/2/85 Observers Lg-Ru/Bt-Ri

Emulsion Batches:
IIaF E 19103-25035
4½" 68° IIaF 2204-06035

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48980	HD39743	05 49.4	+49 01	19:20	20 56	03 28W	+49 04	Fe/-	8-8
48981	HD72359	08 27.2	+10 24	21:41	22:29	02 20 W	+10°09	Fe/-	8-8-8
48982	HD 86360	09 52.9	+12°55	22:35	00:44	03-15W	+12°35	Fe/-	20-20-20
48983	HD138749	15 28.9	+31 42	00 52	01 25	1 40E	+31 26		20-40
48983T	SPOT CAL FOR PLATES 48982-83				15 MIN @	D4 17sec 3900	15U 4200	15U 4910	
48983F	FOCUS TEST							Fe/-	20-20

Spectr. Temp. 23°F ..... Dome Temp./Hum. 0°C ... 73% Transparency Conditions ..... 114 ...

Focus ..... 513 .....

Spectr. Temp. ..... Dome Temp./Hum. -3°C ... 73%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
5211	3"	7	BC	3C	1200/507	3S	IIaD	A	A+K-L	ARC PROBLEMS	
8000	3"	6.2	A0	"	"	"	"	"	SB-L		
35000		5.22	B	"	"	"	IIaF	A	SB-B/L	T=34°F F=513 cloud	fine
7473		4.10	B7	"	"	"	IIaJ-E	A	Be B/L		fwk
							"				
							IIaO	A		T=33°F F=513	

1/15 Wed-Thurs

Date Apr. 3-4/55 Observers BT-Jn

Emulsion Batches: 8"68° IIaO-E 19103 -25035

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp	Exp Mtr
48984	HD115216	13 30.3	+37 42	23 51	00 27	0 33E	+37 17	Fe/16	2-12	
48984	TV Spot Calib	for 48984-85			15min C	1.5U 04	03 03			
48985	HD122742	13 58.6	+11 16	00 33	02 55	1 20W	+10 55	Fe/16	8-10	

Spectr. Temp
Focus
Spectr. Tem

Spectr. Temp. 34°F Dome Temp./Hum. +30°/92% Transparency Conditions ... Hazy - cloudy ... 116

Focus ... 5.1.3 ...

Spectr. Temp. 33°F Dome Temp./Hum. +29°/100%

Comp. Type Filter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/	1/4150	2"	5.3	F2 IV	BC	1200/50.7	BS	IIaO E	A	Ly-SB	* Fe arc fired manually Fe/wr6	
								IIIaO E				
Fe/	3668	2-3"	6.8	G8 V	BC	1200/50.7	BS	IIaO E	A	KK Asm Sp	* some cloud	

117 Sun-Mon

Date Apr. 7-8/85 Observers BH-Tm

Emulsion Batches:
IIIaJ-E 29014 -06035
IIaO-E 19103 -25035

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
48986	HD86360	9 52.9	+12 55	19 24	20 23	0 46E	+12 33	Fe/2	20-20-2
48986T	Spot Calib	for 48986							
48987	HD95735	10 57.9	+36 38	20 27	22 19	0 03W	+36 07	Fe/2	8-8-8

Spectr. Temp. 42°F Dome Temp./Hum 39°F/64% Transparency Conditions Fine - hazy - cloudy 118

Focus 5.11

Spectr. Temp. 40°F Dome Temp./Hum. 32°F/70%

Comp. Type Filter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/2	5152	1"	5.22	B9IV	BC	1200/5.07	BS	IIIaJ-E	A	Bin-SB	* Wr 6 e done manually	Fine
Fe/2	1471	1-2"	4/60	F8	BC	1200/30.7	BS	IIaO-E	A	KK Asm Sp. some cloud (OK but Fe strong wk Ca K ** KK - maybe you might push this later		

119 Mon-Tues

Date Apr. 8-9/55 Observers BT-Tm

Emulsion Batches:
IIIaJ-E 29014 - 29035
IIaO-E 19103 - 25035

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr
48988	HD47105	6 31.9	+16 29	19 20	19 24	1 38W	+16 26	Fe/2	27-27	2 143
48988T	Spot Calⁿ for 48988				15 min @ 17.5V	09 3400	15V 4300	15V 4200		
48989	HD39743	5 49.4	+49 01	19 29	21 42	4 37W	+49 06	Fe/2	8-8-8	50.7
Attempted to observe Supernova Nec Staples in NGC3359										
48990	HD 103095	11 47.2	+38 26	22 09	00 18	1 18W	+37 51	T[illegible]	8-8-8	8.5
48990T	Spot Calⁿ for 48989-91				15 min @ 15V	D4 3500	D3 4300	D2 4000		
48991	HD122742	13 58.6	+11 16	00 25	00 36	1 26W	+10 03	Fe/2	8-8-8	8.14

Spectr. Temp. 39°F Dome Temp./Hum 30°F/62% Transparency Conditions Fine - Shary 120

Focus 511

Spectr. Temp. ____ Dome Temp./Hum. 42°F/70%

Comparison Type/Filter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/2 27	22243	3"	1.9	A0 V	BC	1200/50.7	BS	IIaJ-E	A	KK Asm Sp		Fine
								IIIaJ-E				
Fe/2 88	5027	3"	V 6.2	G8 III	BC	1200/50.7	BS	IIaO-E	A	Ly Pgm.	Set 71 T=36°	sl wk
79	(Comp Hg 4 find :f)									(@ 430 cnts - chair bolt, placed to	(mark index of grave)	
	8015	3"	7.20	G8 VI	BC	1200/50.7	BS	IIIaJ-E	A	Asm Sp	Set 513 T=22°	Fe wk sl wk
								IIaO-E				
Fe/2 114	8114	3"	6.8	G8 V	BC	1200/50.7	BS	IIaO-E	A	KK Asm Sp	cloud Set 514 37°	Fine

121 Tues-Wed

Emulsion Batches:

Date Apr. 9-10/85 Observers Gry - Tn ... some kibitzing by ... (Date UT)

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time U.T.	Ending Time U.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
48992	HD 80081	9 12.6	+37 14	01 20	01 28			FeNe	2-2
48993	"	"	"	01 33	01 49			"	"
48994	HD 85795	9 49.2	+50 18	02 16	03 15			"	"
48995	HD 97633	11 9.0	+15 59	03 24	03 35			"	"
48996	HD 107466	12° 19.3	26° 39'	03 46	04 32			"	"
48997	HD 106741	12 10.5	+57 35	04 40	04 49			"	"
48998	HD 137422	15 20.9	+72 11	05 01	05 08			"	"
48999	HD 141003	15 41.6	+15 44	05 22	05 38			"	"
49000	HD 143874	15 58.0	+23 05	06 31	07 06			"	"
49001	HD 145607	16 6.7	-8 17	07 15	08 53		-8 30	"	"
49002	HD 170073	18 27.4	+58 45	09 04	09 52		+58 53	"	"
	4 Flat Flds -		90 secs		with Ktio gorey fig				
			120 secs						
			170 secs	(better centering of light)					

Spectr. Temp. ..... Dome Temp./Hum. 122°/56% Transparency Conditions . Fine 122

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. 120°/60%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
11,147	2.5"	4.69	A-V$_n$	BC	1800/423	250/7	912	4400	Rel-cor Grg		
15205					"	"	2070	"			
17782	3"	5.34	A3-V	LC	"	"	2378	"			
19134	"	3.33	A2-V	"	"	"	2524	"		T = -150.2 + (Dust on Slit Wheel)	
18663	"	5.26	A2-V	"	"	"	2392	"		-150.2 "	
20527	"	3.34	A2-V	"	"	"	2436	"		"	
30370	2	3.10	A3D-V	"	"	"	2383	"		-150.2 "	
31512	2"	3.73	A2-IV	"	"	"	2501	"		refilled dewar before exp	
29928	2"	4.90	A2-V	"	"	"	2392	"		-150.2 dark fr	
28069	3"	5.55	A-V	"	"	"	2492	"		-150.4 + dust	
30132	3"	5.06	A1-V	"	"	"	2387	"		-150.3 nice star comparison	
		1:1	1313 cnts							-150.6	
			1635						APR 10 08:01E	-149.1°C TOLED LN2	
			2554								
			2414								

123 Wed-Thurs

Date Apr 10-11, 1985 Observers G.Y.-T.m

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
	Dark 1min	All covered incl slit		01 38 00	01 39 00	0 0	Vertical		
	" "			01 40 30	01 41 30				
	" 5 min			01 43 30	01 48 30				
	" 15 min			01 51 00	02 06 00				
	" 60 min			02 08 00	03 08 00				
	Flat Flds (2 min T=-149.7 2513 cts, bad),			(2 mins #1 T	-149.6	heater to 10V, 15 mins to cure moisture		34	10 cts
49003	HD102647	11 43.9	+15 08	05 29	05 36	W		Fe Ne	0-2
49004	HD 108382	12 22.0	+27 23	05 48	05 50		+2755	"	2-2
Flat Flds & dark (1.5 min		T=-149.4	3042 cnts), (1.5 min		2915 cnts), (1.5 min		2817 cnts)		

Spectr. Temp. ..... Dome Temp./Hum. +36°F/55% Transparency Conditions ...clouds...clear...hazy...

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. +31°F/91%

~~Exp. Min.~~ Cnts	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
										T=-150.1 heaters on	
-2										T=-149.8 " "	
10										T=-149.8 " "	
21										T=-149.6 " "	
26											
k), (#2 1.5 mins			T-149.6,		2552 cts)		(#3 1.5 mins	Heaters set to 5V.		cts (#4 1.5 mins 2394 cts)	
31964	3"	2.33	A2V	BC	1800/42.3	250/.7	2641 Counts	T-149.5, 2523 4900	Gig Retican	T=-149.3°C	
29473	3"	5.08	A3	"	"	"		"	"	" fog on camera cloud window	
(1.5 min		2804 cnts)									

125 Thurs-Fri Page #1

Emulsion Batches:

Date Apr. 11-12.1.8.5..... Observers ..Gray-Tm.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
	Focus Tests (It seems that increasing Temp requires a CCW correction) also, there seems to be [illegible]								
	FH Flds + dark (90sec T-1458 351 cnts) (70sec T806)				(90sec 2259 cnts.)				
49005	HD 80081	9 12.6	+37 14	20 24	20 41			Neutral	2-2
49006	HD 70313	8 16.2	+53 33	20 53	22 02			"	2-2
49007	HD 97633	11 9.0	+15 59	22 11	22 20			"	2-2
49008	HD 102647	11 43.9	+15 08	22 27	22 31			"	2-2
49009	HD 106591	12 10.5	+57 35	22 40	22 49			"	2-2
49010	HD 108362	12 22.0	+27 23	~23 00	23 43			"	2-2
49011	HD 110411	12 36.8	+10 47	23 50	00 29	0 52W		"	2-2
49012	HD 116706	13 20.3	+24 23	00 39	01 54	W	+24 00	"	2-2
49013	HD 122408	13 56.6	+2°02	02 01	02 27	1 29W	+1 39	"	2-2
49014	HD 137422	15 20.9	+72 11	02 35	02 42	0 27W		"	2-2
49015	HD 125162	14 12.6	+46 33	02 51	03 13			"	2-2
49015	HD 141003	15 41.6	+15 44	03 23	03 36	0 56W		"	2-2
49016	HD 156164	17 10.9	+24 57	03 43	03 50			"	2-2

Spectr. Temp. ..... Dome Temp./Hum. 135°F/56% Transparency Conditions F.c. ..... 126 .....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. ...../.....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion Reticon	P.H.	Program	Remarks	Quality
[illegible]	[illegible]			BC	1800/423	250/17	cnts		T=43 °F	Refocus 4°C ok	
(90 sec	2255 cnts)				"	"					
31063	3"	3.88	A3V	BC	1800/423	250/17	2449		Reticon-Grey		
28185	3"	5.51	A3V	"	"	"	2241		"		
30082	"	3.33	A3V	"	"	"	2447		"	T=146.0	
31165	"	2.2[illegible]	A3V	"	"	"	2649		"		
30976	"	3.7[illegible]	A3V	"	"	"	2399		"		
30047	"	5.08	A1V	"	"	"	2287		"		
30034	"	4.97	A0V	"	"	"	2475		"	T=-196	
30180	"	5.24	A3V	"	"	"	2461		"		
30083	"	4.36	A3V	"	"	"	2540		"	Top of N²	
31026	2"	3.10	A3V	"	"	"	2415		"	T=-145.9	
30595	2"	4.26	A0p	"	"	"	2467		"		
30270	"	3.73	A2V	"	"	"	2446		"		
30174	"	3.22	A3V	"	"	"	2364		"		

127 #2

Emulsion Batches: .....

Date Apr 11-12 cont... Observers .....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49017	HD 156729	17 14.2	+37 24	0356	04 19	W		Fe Ne	2-2
49018	HD 170296	18 23.5	-14 38	0427	05 06			η	2-2
	Flat Fields (90 sec T-1463 297 cnts) (90 sec 2200 cnts) (90 sec 2271 cnts)								
	Focus test Spectrograph		Temp = +33°F		Suggests Rot'n of 51 °CW)				
			Apr 12	08:05	LN_2 Temp		-145.1 °C		
	Apr 12 - Guy did recorded a series of Dark exps						1 min → 90 min's		

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions .....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. 42°F / 56%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	~~Emulsion~~ Cam's	P.H.	Program	Remarks	Quality
30395	2"	4.70	A2V	BC	1200/423	25/17	2339		Ret. cen. Gey		
28081	4"	4.76	A3$\bar{V}_n$	"	"	"	2369		"		
(90sec		2117	-4½)								
∴ A 10° drop of Temp results in ~ 47° CW corrects											

129 #1 Mon-Tues Pocket Spectrograph

Emulsion Batches: .....

Date Apr. 15-16. 1985 Observers Bt.-Tn. .....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
mk 31	HD 47839	6 35.5	+9 59	19 41	19 48	2 27W	+9 58		15 sec
	HD 69267	8 11.1	+9 30	19 54	19 59	1 01W	+9 15		
	HD 70272	8 15.9	+43 31	20 03	20 10	1 06W	+		
	HD 74395	8 38.8	-6 52	20 15	20 25	1 00W			
	HD 77912	9 00.2	+38 51	20 31	20 39	0 52W	+38 32		
	HD 82210	9 25.6	+70 49	20 49	20 59	0 45W	+69 58		
mk 32	HD 90537	10 22.1	+37 13	21 08	21 19	0 04W			
	HD 92125	10 33.1	+32 30	21 23	21 34	0 14W	+32 05		
	HD 98262	11 13.1	+33 36	21 29	21 51	0 09E	+33 14		
	Spot Calib	15 min @ 15V	D3,	4300Å					
	HD 103212	11 40.7	+7 05	21 59	22 29	0 06W			
mk 33	HD 102870	11 [illegible]	+20 20	22 54	23 05	0 34W			
	HD 109358	12 29.9	+41 54	23 10	23 23	0 08W			
	HD 111812	12 46.8	+28 05	23 29	23 40	0 08W	+27 38		
	HD 113139	12 56.4	+56 54	23 46	00 09	0 27W			

Spectr. Temp. ..... Dome Temp./Hum. 55°F./60% Transparency Conditions .S/ hazy..... 130

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. ..... /

note Telescope focus changed approx 2 min of declination after 10:00 hr of focus switch nearest hr of spectrograph

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	poor	4.41	07				IIaO				
	"	5.00	K4								
		5.80	K45								
mixed plate -		1/8"	from edge to ≈ center			1 set of spots -			(From same IIaO batch as spectra)		
		5.27	F2V								

131 #2

Emulsion Batches:
.....
.....
.....

Date ..... Observers .....

Spectr. Temp
Focus .....
Spectr. Tem

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp	Exp. Mtr.
MK 33	HD 107665	14 27.5	+30 49	00 19	00 33	0 40E				
	HD 113996	13 02.4	+28 10	00 51	01 31	1 44W	+27 43			
MK 34	HD 119228	13 36.9	+55 11	01 44	02 29	2 08W	+54 47			
	HD 112769	12 53.9	+17 57	02 35	02 56	3 17W	+17 33			

Spectr. Temp. ..... Dome Temp./Hum. 50 ..... Transparency Conditions 132

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. 50°F/93%

Comparison Type/Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				4·88	K3/II		Patet		IIaO				
				6·28	K5II							WNW of Pair in Finder thin clouds hazy	
				6·30	M2								
				6·34	M1IIIb							cloud	

133 '85

Date Tues/Wed Apr 16/17 Observers Kly-Tn

4½" 68° Emulsion Batches: III a-J 6 29014 – 27035

8" 68° II a-E 19103 25035

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp	Exp. Mtr.
49019F	Focus test					2 10W	+16 39			
49019	HD 47105	6 31.9	+1629	19:36	1943	2 29W	+1629	Fe/Ne	12	
49020	HD 66751	7 59.9	+70° 0'	19:50	2135	245W	+69 51	"	8-8*	
49020T	Spot Calc for 49020 – 23.				15 min @ 15V	3900 D4	4300 D3	4 D2	2-0	
49021	HD 96202	11 05	-26 45	2146	2250	105W	-2708	Fe/Ne	12-	
49022	HD 103095	11 47.2	+3826	2302	130	300W	+3751	"	8-8	
49019T	Spot Calc for 49019, 24				15 min @ D4	17.5V 3900	15V 4300	15 4	2	
49023	HD 122742	13 58.6	+1116	135	346	307W	+1053	F/	8	
49024	HD 137909	15237	+2927	350	440	236W	+2909	"	17	

Spectr. Temp. 55.5°F ..... Dome Temp./Hum. 43°F/52% Transparency Conditions Good ... gusty ... 134..
Focus 509 ..... Cloud cleared
Spectr. Temp. 36°F ..... Dome Temp./Hum. 28°F / 52%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
							IIIaJ	A		~~Too weak~~ ~~Stretched~~ fogged etc.	
24,000	5"	1.9	AOIV	BC	1200/ 509	BS	IIIaJ-E	A	KK AsmSp	(discarded Tay	v sl. strong
5000	"	6.5	dF8	"	"	"	IIaO-E	A	" *(mid Fe)	didn't move decker stopped due to pier	indirect ex. OF
							IIaO-E				
900	1-6"	5.6	F4V	BC	1200/ 509	BC	"	A	KK AsmSp	* West Limit of Hk dec Set 509 T=42°	fine
3300	3-5"	7.2	G8V	"	"	"	"	A	"	Set 510 T=45°F	Fine
							IIIaJ-E				
2,000	3-5"	6.8	G8VI	BC	1200/ 509	BC	IIaO-E	A	KK AsmSp	Set 511.5 T=40°	Fe sl wk Fine
0700	"	3.93	FOp	"	"	"	IIIaJ-E	"	"	" T=38°F	fine

KK There are no more IIIaJ in dome. Just lost 4-5, some strip broke, so suddenly used are more. In batch started in vacuum A/17

135

TOOR 1382 [illegible]

Date ~~SAT-SUN~~ APRIL 20-21/85 Observers ....Kly - Ri.....

4½" 68 Emulsion Batches:
IIIaJ 29114 - 19045
IIaD-E 19103 - 07045
.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49025	HD 86360	9 52.9	+12°55'	22.55	00:30	4h 13W	+12°33	Fe/2	17-17-
						@19.5V	@15V	@15V	
49025T	SPOT CALN FOR PLATES 49025-27				15 MIN @ D4	3900	4300	4810	
49026	HD 137909	15 23.7	+29 27	0037	101	0047E	+29 14	Fe/W2	17-17-
49027	HD 138749	15 28.9	+31 42	119	150	002E	+31 27	"	17-17-
49028	HD 144287	16 0.0	+25 30	01.58	04:41	216W	+25°20'	"	8-8
							@D4 @D3 @D2		
49028T	SPOT CALN FOR PLATE 49028				15 MIN @ 2 VOLTS		3900 4300 4810		
49028F	FOCUS TEST							Fe/W6	20-20

Spectr. Temp. ..... Dome Temp./Hum. 7°C ... 87% Transparency Conditions . HAZY SCATTERED CLOUDS SURROUNDING 136

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. 8°C 87% Very bright, pulsating aurora streams 10° south of zenith 02:00 hrs

Comparison Type/Filter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/Ne 1-1-1	17700	3"	5.22	B9 IV	B.C.	1200/50.7	B.S.	IIIaJ+f	A	5B-B1	1ST HR FORGOT TO REMOVE FILTER T=52°F F=50? FREE TIME	slightly weak
@ 51 48a								IIIaJ+f				
Fe/Ne 3-1-1	25000	3"	3.93	F0p	B.C.	1200/50.7	B.S.	IIIaJ+f	A	KK AsmSp		fine *
"	45246	3"	4.1	B7nn	"	"	"	"	A	"	T=50°F F=509 cloud	fine
1:8	440	3"	7.6	G8 V	"	"	"	IIaO-E	A	"	cloudy	Fe slit slant
D3 5.01 00 4:0								IIaO-E				
Fe/Ne 2:1 6					B.C.	1200/50.7	B.S.	IIaO	A		T=49°F F=509	OK
											* red comparison lines are sharp for a change – why?	

137 Sun-Mon

Date Apr. 21-22/85 Observers BT-RI

4½" 68° Emulsion Batches: IIIa-J 29114-19045

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
49029	HD 138749	15 28.9	+31 42	22:49	23:28	2h 21°E	+31 27	Fe/2	17 17½	4004
49029T	SPOT CALN FOR PLATE 49029				15 MIN @ D4	① 17U 3900	② 15U 4300			
49029F	FOCUS TEST							Fe/4R/6	35 35	
	PACKET SPECT + CHCY6			23:50	03:47					

Spectr. Temp. 70°F ..... Dome Temp./Hum. 18°C/66% Transparency Conditions .....

Focus 503 ..... opened shutters at 19:30 to air out dome 100% at first then 38%

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
45004		4.10	B1m	BC	1200/50.7	BS	IIIaJ-E	A	B/n Be	Highest priority * in B/n pgm	Fe slwk fine
							IIIaJ-f				
				B.C.	1200/50.7	B.S.	IIIaJ-f	A		T=70°F F=503 center value	
										CLOUDED IN	

139

Date Mon/Tue. April 22-23/85 Observers Bt-R1

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
	POCKET SPECT			20:00	21:20				
				CLOUDS					
				22:40	04:37				

Spectr. Temp. ..... Dome Temp./Hum. 22°C ... 60% Transparency Conditions . HAZY WITH SOME THIN CLOUDS AT TIME BECOMING AT THE NIGHT

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. 18°C ... 82%

Comparison Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality

141

Date Tues-Wed April 23-24/85 Observers B.t.-R.i.

4 3/4 70° Emulsion Batches: IIIa-J 7 2911 4-19045

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
	POCKET SPECTROGRAPH			19:55	22:00					
49030	HD138749	15 289	+31 42	22:09	01:08 @ 17.8U	00h34E @ 15U	+31°26 @ 15U	Fe/2 wk6	17-17-F	30,000
49030T	SPOT CALIB FOR PLATE 49030			15 MIN @ 4	3900	4800	4010			
49030F	FOCUS TEST							Fe/wk6	35-35	
	POCKET SPECTROGRAPH			01:41	02.40					

Spectr. Temp. ...66°F..... Dome Temp./Hum. ...16°C...80% Transparency Conditions Hazy ...WITH SOME CLOUDS...
VERY POOR SEEING

Focus .....504.....

Spectr. Temp. ..... Dome Temp./Hum. ..12°C...75%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
30,000	SEEING GROSS	4.10	B7nn	B.C.	1200/50.7	B.S.	IIIaJ	A	B/n Be	Highest priority in B/n pgm CLOUDS For ½ Hrs	fine
							IIIaJ				
				B.C.	1200/50.7	B.S.	IIIaJ	A		T=60°F F=504	cirrus
										CLOUDED IN	

143 Thurs/Fri

Date Apr. 25/26, 55 Observers L. F.

Emulsion Batches:

4°14,70° IIIaJ-E 29114 -19045

7°1/2,70° IIaO-E 19103 -07045

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
49031	HD86360	09 52.9	+12 55	20:05	21:14	01 15W	+12 32	Fe/#2	20-20-2	35060
49031T	Spot Calib for	49031			15 min @ D4	17.5V 3900	15V 4300	15V 4300		
49032	HD94118	10 46.7	+46 20	21:20	23:46	02 54W	+45 54	Fe/#2	9-9-9	F700

Spectr. Temp. 64°F Dome Temp./Hum. 62°F/63% Transparency Conditions fine - cloudy 144

Focus 505.5

Spectr. Temp. 60.5°F Dome Temp./Hum. 55°F/88%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
35060	1"	S2	B9I	BC	1200/507	BS	IIIaJ-E	A	SB - Blu		fine
							IIIaJ-L=				
5300	1-3"	7.1	A2	BC	1200/507	BS	IIaO e	A	SB - Ly	Grungy → Thick Ly so	sl. weak grainy sl. flexure

145 Fe/sor

Date April 26/27 1965 Observers Ly - Tu

Emulsion Batches:
IIaO-E 19103 - 07045
IIIaJ-efg 29119 - 25045

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49033	HD86360	9 52.9	+12 55	20:51	23:27	3 33 W	+12 33	Fe/-	20-20-20
49033	Spot Calib for 49033; 34				15 min 04	175V 3900	15V 4300	15V 4810	
49034	HD138749	15 28.9	+31 42	23:35	00:46	0 42E	+31 28	Fe/-	20-20-20
49035	HD157482	17 18.5	+40 04	00:51	03:13	0 04E	+40 02	Fe/-	9-9-9
49035	TV Spot Calib for 49035; 36				15 min 15V	D4 3900	D3 4300	D3 4810	
49036	HD192713	20 11.2	+23 12	03:20	04:37	1 34E	+23 30	Fe/-	9-9-9

07045
25045

Spectr. Temp. 55°f Dome Temp./Hum. +48°f/80% Transparency Conditions clear & 20° 145

Focus 507

Spectr. Temp. Dome Temp./Hum. +38°f/98%

Comparison Type/Filter/ Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/ 20 sec 480	27300	5-8"	5.2x	BGIV	BC	1200/507	BS	IIIa Jefg	A	SB-Blu		Approx Focus
								IIIaJefg				
Fe/ 20 sec 480	45266	5-8"	4.1	B37m	BC	1200/507	BS	IIIa Jefg	A	Be-Blu	T=50° Set 507 Fe s/wk Exp	Fine
Fe/ 20 sec 480	11300	"	6.2	FB+G8	"	"	"	IIaOe	A	SpRu-Blu	T=48°F Set 509	fine
								IIaOe				
Fe/ 20 sec 480	7050	4-6	6.2	GBIb	BC	1200/507	BS	IIaOe	A	EB-Lg	T=43°F Set 511	fine

147

Sun-Ton

Date Apr. 28/29 1985 Observers Kly.-Tn./Kly.-Tn.

5"68° Emulsion Batches: IIa-J: e.f.g. 29114-25045

Spectr. Tem
Focus
Spectr. Tem

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.	Exp. Mtr.
49037	Polaris H HD 8590H	1 22.6	+88 46	20 10	20 17	08 30 W	+89 11	Fe/-	27 s	
49037T	Spot Calib for 49037									
	Pocket Spectrograph of Polaris region									
	Note- We can only use PS from 12 hrs East "Unreversed" to ~ 8 hrs E.									
	+88 142	23 53 1985	+89 22 1985.5	21 55	00 30	9 30 E	+89 23			
	+88 2	00 33.8	+89 22	00 33	02 21	E	+89 21			
	+88 9	03 23.2	+89 03	02 28	03 21	E	+89 02			
	+88 11	03 06.3	+89 27	03 28	04 27	8 37 E	+88 36			

Spectr. Temp. 52° F Dome Temp./Hum. +48°F/70% Transparency Conditions Good 146

Focus 5.08

Spectr. Temp. Dome Temp./Hum. +40°F/88%

Comparison Type/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	25000	2-3"	2.1	F	BC	1200/ 50:7	BS	IIIaJefg	H	KK AsmSp	reversed wrong tilt	
								IIIaJefg			(⅛" relative shift) mottled	
	Too difficult & dangerous in the west. Cancel / reach eyepiece											
			9.4	G5								
			8.8	G8								
			8.0	F2								
			8.4	G0								

149

Mw-Tues

Date Apr. 29/30/May 1 Observers B.t.-T.n.

Emulsion Batches: 4"69° 098-E -2045

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
MK 36	HD 10884	12 25.3	+4 58	02 55	01 04	2 48 W	+		
-	HD 182917	19 21.9	+50 02	01 40	02 45	2 24 E	+50 16		
49038	HD 182917	19 21.9	+50 02	03 05	03 55	1 14 E	+50 18	Fel-	12-15
						15v.03	7VDI	Nel-	12-15
49038 TV	Spot Calib for	49038-39			15 min @	9810	Hd	7VDI 5450	
49039	HD 182917	19 21.9	+50 02	04 01	04 30	0 39 E		Fel-	12-1
								Nel-	12
49039F	Focus test					"	"	Fel-	25
								Nel-	2[illegible]

Spectr. Temp. ..... Dome Temp./Hum. 58°F/53% Transparency Conditions ..hazy..n..Fine.....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. 50°F/60%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
		V 8.5	m7 II	f.o.f.			II-O			Str Vig	
		~8	mb	"			"		CH Cyg		
05 K 70 filter											
10903	1"	V 8	mb	BC	1200/41.5	BS	098-E	A	Obs CH Cyg	Set 508 T=54°F	fine comp s/sh
							"				
21262	1-2"	"	"	"	"	BS	098-E	A	Obs	comp s/sh	good comp for
				"	"	"	098-E	A		Set 508 T=52.5°F	Comp s/sh v sl blue

151

Tues-Wed

Date Apr. 30 May 1 1985 Observers B.J.-T.

Emulsion Batches: .....

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.....

Spectr. Te

Focus ....

Spectr. Te

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr
mK 37	HD 112769	12 53.9	+17 57	20 18	20 32	2 09E				
	HD 108849	12 25.3	+4 58	20 37	21 33	0 39E	+4 34			
	Spot Calc			15 min @	03,15V	4300Å				
	HD 126327	14 19.7	+26 11	21 39	23 11	0 54E	+2550			

Spectr. Temp. ..... Dome Temp./Hum. 65°/50% Transparency Conditions Hazy - s/ clouds 150

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. +60 / 60%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	1"	6.39	m1 m6	pocket			IIaO				
	"	8.33	m7 m	"			"				
							IIaO*			different batch	
	1"	70-9.1	m8	pocket			IIaO				

153

Thurs-Fri

Date May 2-3 1985 Observers B.T.-T.H.

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
MK 38	HD 62345	7 38.4	+24 38	20 17	20 22	W	+24 31			
	HD 62509	7 39.2	+28 16	20 26	20 28		+28 10			
	HD 67594	8 3.6	-2 42	20 39						
	+ More recorded separately			to	21 44					
				Cloudy stretch						
	More factor work		01 hrs	-> 04:30						
	As well as other		Bt program work we did CH Cyg, on Observatory Program							
	HD182917	19 24.2	+50 13	03 36	04 23	0 34E	+50 17			

Spectr. Te
Focus ....
Spectr. Te

Spectr. Temp. ..... Dome Temp./Hum. 54°F / 50% Transparency Conditions Semi cloudy 154

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. 142°F / 60%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
		450	G80Tk	pocket spectrograph			IIaO				
		214	K0Tk				"				
		531	G2Tk				"				
with objct.											
		V=8	Mb	pocket			IIaO		CHcyg		

155 Fri.-Sat

Date May 3-4/85 Observers ST-Tn/Ly-Tn

Emulsion Batches:
4½ 13° IIIaJ-E fg 29114 -07055
8½ 69° IIaO-E 19103 -07045

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr
49040	HD86360	9 52.9	+12 35	21 00	22 54	3 27 W	+12 38	Fe/2	20-40	
49040T	Spot Calc for 49040-42				15 min @ D4	17.5V 3900	15V 4200	15V 4810		
49041	HD135749	15 28.9	+31 42	23:01	23:34	1 27 E	+31 28	Fe/2	20-20-20	
49042	HD 11 20 14 12028	12 48.3	+83 58	23:44	01:58	3 41 W	+83 27	"	20-20-20	
49043	HD 18 2917	19 21.9	+50 02	02 11	04:19	0 34 E	+50 18	"	8-8-8	
49043T	Spot Calc for 49043				15 min @ 15V D4 3900		D2 4200	D2 4810		

Spectr. Temp. 56°F Dome Temp./Hum. /45% Transparency Conditions Fine 150

Focus 508

Spectr. Temp. 50 Dome Temp./Hum. +40° /50%

Exp. Mtr. 25 kgum	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
35091	2"	5.22	B&L	BC	1200/50.7	[illegible]	IIaJ+cfg	A	5S Blm	same	thin 41 fine
							IIIaJ+cfg				
45111	2.5"	4.8	B&L mm	BC	1200/50.7	5S	IIaJ+cfg	A	Be Blm	Exp OK — 51 wrong tilt	
36700	3"	5.2	BE	"	1200/48	"	"	A	wrong one Stell-Pstn	reversed	fine
2100	2"	8.4	M6	"	1200/50.7	"	IIaOe	A	Obs Pgm	T=51° broken wires	blue Em
							IIIaO-e				

657 Tues-Wed

Date MAY 7-8/85 Observers Ly-Tm

Emulsion Batches: A'/A 68 098 -25045

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49044	HD182917	19 21.9	+50 02	00 46	02 14	2 24 E	+50 17	Fe/—	10 - 10
								Ne/—	10 - 10
49044T	Spot Calib for 49044-45				15 min	D3 15V 4810	8V D1 H2		
49045	Nova Vul (Collins) prog 52	20 22.8	+27 30	03 26	04 11	1 29 E	+27 53	Fe/—	10 - 10
								Ne/—	10 - 10

Spectr. Temp. 51F ..... Dome Temp./Hum. 40F / 80% Transparency Conditions ... Some cloudy 158

Focus ..... 508 .....

Spectr. Temp. 47 ..... Dome Temp./Hum. 38 / .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
36 200	5"	≈7	MG	BC	1200/41°	BS	098	A	Obs prgm CHGS	50°F Set 508	good
							098				
585	5"	7	Em	BC	1200/41	BS	"	A	Nova Vul #2 1984	50°F Set 508 Fld drawn in Fld book	only Hα
										should change tilt to 40.5	

159

Date WED. THURS. MAY 8-9/85 Observers Ly - Ri

Emulsion Batches:
Tech-E 19103-04055
Tech-F 29114-02055

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49046F	Focus 9 REST					2h W	+10	Fe/2	20-20
49046	HD72359	8 27.2	+10 24	20 03	20 55	3 14 W	+10 13	"	8-8-8
49047	HD86360	9 52.9	+12 55	21 00	22 24	3 16 W	+12 37	"	20-20-8
49047TI ✓	SPOT CAL FOR PLATE 49046				15 MIN @ 15 VOLTS	① D4 3900	② D3 4300	③ D2 4810	
49048	HD138749	15 28.9	+31 42	22 29	22 58	01 44 E	+31 30	Fe/2	20-20-2
49048TI	SPOT CAL FOR PLATES 49047-				15 MIN @ D4	① A.5V 3900	② 15V 4300	③ 15V 4810	
49049	HD136202	15 14.2	+2 09	23 02	23 25	01 04 E	+1 55	Fe/2	8-X-8
49050	HD8890	01 22.6	+88 46	23 37	23 47	12 08 E	+89 15	Fe/2	30-30
49051	HD182917	19 21.9	+50 02	23 58	03:28	01 05 E	+50 16	Fe/2	8-8-8
49052	HD178574	19 4.0	+1 12	03 36	04:20	60 02 W	+1 24	Fe/2	8-8-
49052F	FOCUS 9 REST					60 02 W	+1 24	Fe/-	20-20

Spectr. Temp. 52°F Dome Temp./Hum. 46°F / 46% Transparency Conditions hazy 160
+ some cirrus clouds in long UT
Focus 508
Spectr. Temp. 64°C / 52% Dome Temp./Hum. 64°C / 52%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				B.C.	1200/50.7	B.S.	IIaO	A		52°F Set 508	OK
6000	3-4	6.2	A0m	"	"	"	IIIaJ-E	A	SB - Ly		OK
32000	"	5.2	B9IV	"	"	"	IIIaJ-f	A	SB - Bln.	51°F SET 508	OK
							IIaO-E				
40225	3	4.1	B7m	BC	1200/50.7	BS	IIIaJ-f	A	Be - Bln.	50°F SET 508	OK
							IIIaJe-f				
6047	3	5.6	F8IV	BC	1200/50.7	BS	IIaDe	A	Std Vel.	48°F Set 509	
32Leo	3	2		"	"	"	IIIaJ-f	A	Asm - KK		Fe str fine
2515		~8.5	M6	"	"	"	IIIaDe	A	Obs fcs	47°F (CH Cyg)	OK
1000	2-3	7.9	F5	"	"	"	IIaDe	A	Ly hym.	45°F SET 510	wk
							IIaO			45°F SET 510	Con- ti- nu- ous Red

161

Emulsion Batches: .....

Date THURS FRI MAY 9-10 / 1905 Observers ...B.-R.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
	POCKET SPECTROGRAPH			21:06	04:06				

Spectr. Ten
Focus .....
Spectr. Ten

Exp. Mtr.

Spectr. Temp. ..... Dome Temp./Hum. ...17°C.....50%... Transparency Conditions fair. with occasional 162
clouds

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .14°C.....60%

Comparison Type/Filter	Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
												CLOUDED IN	

163

1955

Date May 10-11, Fri-Sat. Observers Kly - Ri

8h 6m

Emulsion Batches:
IIa-E 1903-04055
IIaY+f 2911-02055

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49053	VESTA	1955, May 11, 0h UT 13 45.1	+1°39'	21:42	23:35	00 49W	+01°46'	Fe/2	8-8-8
49054	HD 8890H	1 22.6	+8846	23:45	23:54	11 39 E	+89°16'	"	30-30
49055	HD 122742	1358.6	+11 16	00:02	02:20	34.5 W	+10°57'	"	8-8-8
49055T1	SPOT CAL FOR PLATES	49054		15 MIN @ 4	① 17.5V 3900	② 15V 4300	③ 15V 4810		
49055T2	SPOT CAL FOR PLATES	49053		15 MIN @ 15 VOLTS	① D4 3900	② D3 4300	③ D2 4810		
49056	HD 138749	1528.9	+3142	2:26	03:03	2" 30 W	+3130	Fe/2	20-20
49057	HD 137909	15 23.7	+29°27	03.08	4 01	3 31W	+29°17	Fe/2	20
49057F	FOCUS TEST					"	"	"	20

Spectr. Temp. ..... Dome Temp./Hum. ...19°C....36% Transparency Conditions ...hazy / scattered clouds... complete cloud

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. ...16°C....75%

Comparison Type/Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fc/2	8-9-8	6000	4"	6.5	GOV	BC	1200/ 50°7	BS	IIaOE	A	STDVEL	T=72°F Cloud SET 503	good
"	3-3-3	20891	4"	2	F	"	"	"	IIIajeF	A	KKAsmSp	T=70°F " 503	fair
"	8-8-8	6040	3'	6.8	G8V	"	"	"	IIaO-E	A	"	some cloud	good
									IIIajeF				
									IIaO-E				
Fc/2	3-3-3	45017	3	4.1	B7nn	BC	1200/ 50°7	BS	IIIajeF	A	Be-Bln	T=68°F SET 504	fine
Fc/2	3-3-3	5306	?	3.93	F0p	B.C.	1200/50.7	B.S.	IIIajeF	A	kk Asm Sp	T=67°F CLOUDED SET 504	wk
"									IIaO	A		T=66°F SET 504 CLOUDED IN	[illegible]
												Centre V Station	T4

Date SAT. SUN. MAY. 11-12/85 Observers BE-RI

Emulsion Batches:
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.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
	POCKET SPECTROGRAPH			23:12	00:16				

Spectr. Tem
Focus.....
Spectr. Tem
Exp Mir

Spectr. Temp. ..... Dome Temp./Hum. 16°C 92% Transparency Conditions ..... Ido.

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. 16°C 92%

Comparison Type/Filter	Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
												CLOUDED IN	

167

Date Sun Mon 12-13 MAY 85 Observers Ly-Ri

Emulsion Batches:
IIIaJ 29114-02055
.....
.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49058F	Focus Test							Fe/WR6	20-2
49058	HD 86360	9 52.9	+12° 55	20:10	22:40	3 47W	+12° 37'	Fe/WR6	20-20
49059	HD137909	15 23.7	+29 27	22:56	23:29	0452E	+29°15	Fe/WR6	20-202
49060	HD 8890	01 22.6	+89 46	23:37	00.26	10°58E	+89 15	Fe/WR6	25-2
49061	HD 136202	15 14.2	+02 09	00:38	01:16	01 04W	+01°56	Fe/WR6	8-8

Spectr. Temp. ..... Dome Temp./Hum. ...20°C...83% Transparency Conditions ...HAZY.....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Comparison Type	Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/UNe	20-2					B.C.	1200/50.7	B.S.	IIaO	A		T=72°F Set 503	OK
Fe/UNe	20-2	11820	4.5	5.22	B9	B.C.	1200/50.7	B.S.	IIIaJ+f	A	5B-B/h	cirrus.	wk
Fe/UNe	20-2	25000	3	3.9	Fop	"	"	"	"	A	Asm-KK	T=68°F Std 50f	fine
Fe/UNe	20-2	35055		~2	F	"	"	"	"	A	Asm-KK		fine
Fe/UNe	20-2	2241			F&IV	"	"	"	"	A	Std UV	T=67°F cloud	weak

169

Emulsion Batches: IIaF 2911-02055

Date MONTOCK 13-14 MAY 85 Observers Ly.-Ri.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49062	HD86360	9 52.9	+12 55	20:12	22:05	3 16W	+12 03 5	Fe/WR6	15-15-
49063	HD182917	19 21.9	+50 02	22:28	23:00	5 14E	+50 15	Fe/WR6	6-6-6
49064	HD157482	17 18.5	+40 04	23:06	01:40	0 31E	+40 04	Fe/WR6	6-6-6
49065	HD8890	01 22.6	+88 46	01 49	01:59	9 20E	+89 15	Fe/WR6	20-20
49066	HD192713	20 11.2	+23 12	02 10	04.10	0 55E	+23° 34'	Fe/WR6	66-

Spectr. Tem
Focus
Spectr. Tem

Exp. Mtr.
32 21
200
160 85
20 20
7861

Spectr. Temp. 72°F Dome Temp./Hum. 18°C 72% Transparency Conditions Good WITH CIRRUS 170
MOVING AT DAWN
Focus 503
Spectr. Temp. 60°F Dome Temp./Hum. 13°C 88%

Comparison Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	32121	4.5	5 2	B9IV	BC	1200/50.7	BS	IIIaJ	A	SB-Blu	T=72°F Set 503	fine
	200			M	"	"	"	IIaO	A	Obs Pgm	aborted 200 Elm T=67°F Set 505	blank
	16905		6.2	dF&G	"	"	"	"	A	SB3-Ly		fine
	21580		2	F	"	"	"	IIIaJ	A	ASm-KIC	T=62°F Set 503	fine
	7861	4-5	6.2	63V	"	"	"	IIaO	A	EB-Ly	CIRRUS CLOUDS BROKE 4 DEGREES T=60°F	mostly blurred
	locked	at	2X	300		est	900	cont	in	3	hours.	

171

Date TUES-WED 14-15 MAY 85 Observers Ly-R.

Emulsion Batches:
I Hope 29114-02055
II Hope 29611-10055
III Hope 19103-04055

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49067	HD138749	15 28.9	+3 1 42	20.42	22:29	01h50E	+31°30	Fe/wR6	15-15
						①17.8	②15V ③.5V		
49067T	SPOT CAL FOR PLATES 49062,63,67-69				15 MIN @	4 3900	4300 4810		
49068	HD164852	17 52.1	+20 50	22:38	00:59	01h48E	+20.56	Fe/wR6	15-15
49069	HD8890	01 22.6	+88 46	01:10	01:18	09h58E	+89 15	Fe/wR6	25-25
49070	HD178574	19 4.0	+1 12	01:29	03:18	00 36E	+01°26-	Fe/wR6	6-6
	Focus					00 00	+01 26		25-25

Spectr. Ter
Focus....
Spectr. Te
Exp. Mtr.

Spectr. Temp. 64°F Dome Temp./Hum. 13°C 96% Transparency Conditions Cirrus around all night 172.

Focus 505

Spectr. Temp. 54°F Dome Temp./Hum. 12°C 99%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
45013	8"	4.1	87mm	Bc	1200/507	B5	IIIaJ-f	A	Be "Blue"	T=66°F SET 505	fine
							IIIaF-f				
35004	4-5	5.2	B3IV	Bc	1200/507	B5	IIIaJ-f	A	BB3 - Blue	T=61°F set 506	fine nice dbl
25232		2	F	"	"	"	"	A	Asm - KK	T=56°F set 507	fine
1019	3-4	7.9	F5	"	"	"	IIaD	A	Ly Pgm.	cloud " T=54°F - 507	weak

173

Fri - Sat

Date May 17-18 85 Observers BT-Tn

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
	Pocket Spectrograph work			20:15 →	04 AM EST				
	Fld drawn for 2nd star done ie HD 68009								
	RX ~~D~~ 800								
	CH Cyg								

Spectr. Ter
Focus....
Spectr. Te

Exp. Mtr

Spectr. Temp. ..... Dome Temp./Hum. 50°F / 73%

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. +11°F / 97%

Transparency Conditions ... OK – cloudy / Rain gusty NW

Comparison Type/Filter	Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality

175

Sat Sun

Date MAY 18-19 1995 Observers B+-Tn

Emulsion Batches:
IIIa-J e.fg. 2614 - 10055
IIa-E 1903 - 04055

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
	Pocket Spectrograph - 20:15 - 00:35									
49071	HD138749	15 28.9	+31 42	00 55	01 46	1 38 W (175V)	+31 31 (15V)	Fe/Ue	15-15-15	4595
49071 TV	Spot Calib for 49071-72,75				15 min @ D4	3900	4300 (15V) 4810			
49072	HD5890	1 22.6	+88 46	01 54	02 05	8 55E		Fe/Ue	22-22	3378
49073	HD182917	19 21.9	+50 02	02 26	03 16	0 36E	+50 15	"	8-12	265
49073 TV	Spot Calib for 49073, 74, 76			15 min @	15V D4 3900	D3 4300	D2 4810			

Spectr. Tem
Focus ... 5
Spectr. Tem

Spectr. Temp. +.96.°F..... Dome Temp./Hum. +47°/62% Transparency Conditions ..mostly clear..... 1746

Focus ...510.....

Spectr. Temp. ..... Dome Temp./Hum. +38°F/96%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
40895	2-3"	4.10	B7mm	BC	1200/50.7	BS	IIIaJ-efg IIIaJ-efg	A	Bln Bc	Light cloud	sl str.
9528	3-5"	2	F	BC	1200/50.7	BS	IIIaJefg	A	KK Asm (Obs)		v sl str
265	"	2/8.4	M6	"	"	"	IIaOE II-0-E	A	Obs Pgm	Thru cloud - too thick	v v wk Some Em
										IIIaJ's have high background	

177

Emulsion Batches: IIa0-E 19103 - 04055

Date Sun. Mon. May 19-20/85 Observers Kly - Tn - Lgt (KK)

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
	Compared reg	TV to	IT + CCD system on 5 mag star				- Reg TV	brighter		
49074	MD 122745	13 53 6	+11 16	22.24	0030	2 00W	+11°.00'	Fc/2	8-8-8	6428

Spectr. Ten
Focus ..
Spectr. Te

Spectr. Temp. 161°F Dome Temp./Hum. 60°F / 70% Transparency Conditions hazy + cloud 178

Focus set 506

Spectr. Temp. ..... Dome Temp./Hum. 61°F / 83%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
5428	3-5"	6.8	G8V	BC	1200/ 5.8	BS	IIa-O-E	A	KKFSM3P	some cloud	good
						placed in previous night's Exp Box					

Comparison Type/Filter Exp

179 Mon.-Tues

Date May 20-21/85 Observers BT-Tn

Emulsion Batches:
5"/68° Wratten 2611A-10055
8"/65° IIa-O 19103-24055

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49075	HD8890	1 22.6	+88 46	23: 31:	23: 43	11 11E	+89° 16	Fe/2	22-22
49076	HD182917	19 21.9	+50 02	23: 54	03 57	0 11W	+50° 18	"	8-8-

Spectr. Ten
Focus. 5
Spectr. Ten

Exp. Mtr.	
24733	
1672	

Spectr. Temp. 60°F Dome Temp./Hum. 51°F/95% Transparency Conditions Clear, FF 30 180

Focus 5706

Spectr. Temp. ..... Dome Temp./Hum. 48°F/85%

Comparison Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/Ar 17-41	24733	4"	2	F	BC	1200/50.7	BS	IIaJ-e	A	KK Asm (Obs)		vsl str
" 7-6	1672	3'-5"	X 4	M6	"	"	"	IIaJ-e	A	Obs Pgm	T=59°F F=50% (but Em & some continuum)	● weak

181

Wed-Thurs

Date May 22-23/85 Observers T.G.

Emulsion Batches: Ilford-efg 26114 - 10055

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49077	HD 138749	15 289	+31 42	22 41	23 13	0 34 E	+	Fe/2	15-15-15
49077 TV	Spot Calib for 49077				15min @ D4	17.5V 3900	15V 4300	15V 4810	
49078	HD 164852	17 58.1	+20 50	23 21	01 14	1 02 E	+20 56	Fe/2	15-15-15

Spectr. Te
Focus...
Spectr. Te
Exp. Mtr
40 25
37 17

-1055

Spectr. Temp. +60°F Dome Temp./Hum. +52°/70% Transparency Conditions . part cloudy 182

Focus 507

Spectr. Temp. +58°F Dome Temp./Hum. +51°F/80% 1st use of new mirror

Comparison Type Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/2 BBS	70257	3"	4·1	B7m	BC	1200/507	BS	IIIaJefg	A	Be-Blu		fine
								IIIaJefg				~
Fe/2 BBS	32173	3-1"	5·2	B3IIIa	BC	1200/	BS	IIIaJefg	A	SB3-Blu	some cloud vsl	Wk
											3 43	
											11 43 12 10	

183 Thurs-Fri Pocket Work

Date May 23-24/85 Observers Bt-Tn

Emulsion Batches: IIa-O-E 19103 -04055

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
	Pocket 20:26 → 01:34								
49079	HD190390	19 59.6	-11 53	01 52	03 56	0 17	-11 31	Fe/2	4 4
49079T	Spot Calib for 49079				15 min @ 15V	D4 3900 D3 4330 D2 4810			

Spectr. T
Focus
Spectr. T
Exp Mtr

Spectr. Temp. 62°f Dome Temp./Hum. 62°f/52% Transparency Conditions Fine 184

Focus 507

Spectr. Temp. 59°F Dome Temp./Hum. 54°f/64%

Comparison Type/Filter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	25K											Fe s/str
F/2 44	0744	3"6" 6.86	F/III	BC		1200/50.7	*150μ	IIaO-E	A	rG/Fe Pgm	* Longest slit Length All slit optics in	slwk
								IIaO-E				
											Mute (Comp should be ≈ 1/3 of Sl cen Comp)	
											Try 3-3-3	

185

Fri-Sat

Date May 24-25 1985 Observers Lg.t.-Tn.-Klg

Emulsion Batches:
Tri-X-Pan 2614 -10055
IIa-O 19103 -14055

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49080	HD 86360	9 52.9	+12 55	20 29	21 29	323 W	+12 36	Fol 2	12-16
49080 Tv	Spot Cal's for	49080 - 81, 84-85		15 min @ D4 3900	17.5V 15V 4300		15V 4810		
49081	HD 137909	15 23.7	+29 27	21 33	21 48	145 E	+29 18	Fol 2	8-12
49082	HD 122742	13 58.6	+11 16	21 53	23 00	005 W	+10 57	"	8-12
49082 Tv	Spot Cal's for	49082 - 83, 86-88		15 min @ 15V D4 3900		D3 4300	D2 4800		
49083	HD 140538	15 39.1	+2 50	23 08	0053	003 W	+2 39	Fol 2	8-8
49084	HD 159561	17 30.3	+12 38	0056	0001	0 1/4 E	+12 41	"	12-16
49085	HD 8890A	1 22.6	+88 46	0007	0015	10?34 E	+89 18	"	12-16
49086	HD 165908	18 03.2	+30 33	0020	0047	1 27 E	+30 39	"	5-8
49087	HD 161391	17 38.5	+4 37	0050	0057	0054 E	+4 40	"	4-6
49088	HD 144287	16 0.0	+25 30	0105	0343	332 W	+25 23	"	8-8
49028 F	Focus test					00	"	"	20-40

* Mr Lgt must have missed 83 pass by ~ 00h or else we went thru a time warp!

Tn

Spectr. Te
Focus ....
Spectr. Te

Exp. Mtr.

Spectr. Temp. +72°F Dome Temp./Hum. 66°/50% Transparency Conditions OK - Sl. hazy 18C

Focus -0.4

Spectr. Temp. +63°F Dome Temp./Hum. 60°F/70%

Comparson Type/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	20,070	1-2"	5.2	B9 IV	RC	1200/50.7	BS	IIIaJ-efg	A	SB-Kkm	* No Fe Arcs on any plates due to misplaced filter wheel pos.	fine
								IIIaJ-efg				"
	24=.1	2"	3.93	F0p	RC	1200/50.7	BS	IIIaJ-efg	A	Hsm Sp. H&K		f..e
"	5950	1"	6.8	G2 V	"	"	"	IIaO-e	A	"		sl wk
								IIaO-e				"
	6334	1-2"	6.55	dG5	RC	1200/50.7	BS	IIaO-e	A	Asm Sp H&K	broken 2 pcs	sl wk
	25,200	"	2.2	K5 III	"	"	"	IIIaJ-efg	A	"		fine
	5448	2.3"	2	F	"	"	"	"	A	"		sl/str
"	612	2"	5.5	F7V	"	"	"	IIaO-e	A	"	some cloud	v sl wk
"	7134	2"	3.9	K2 III	"	"	"	"	A	std vel		fine
"	7050	2"	7.6	G8 V	"	"	"	"	A	KK Asm Sp	T=66°F Sel 505.5	sl wk
					"	"	"	IIaO	A	Sel 505.5	Cloud at end	
										T=63°F		blurr
												discarded

187 Tues-Wed

Date May 28-29, 85 Observers BA-TM

Emulsion Batches:

7" 68° IIaO-E 19103 - 14055

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr
49089F	Focus Test					0 0	+12 36	Fe/2	20-20	x25 k
49089	HD 113139	12 56.4	+56 54	20 29	21 03	0 1W	+56 33	Fe/2	8-8-8	6532
49090	HD 112264	12 50.4	+47 44	21 06	00 08	3 23W	+47 23	Fe/2	8-8-8	6521
49090T	Spot Calib for	49089-91			15min @15V	D4 3900 D3 4300	D3 4310			
49091	HD 190390	19 59.6	-11 53	00 22	03 49	0 05E	-11 29	Fe/2	3-3-3*	6497
49091F1						0 0	"	"	10-10	
49091F2						0 0	"	"	10-10	

Spectr. Temp. +63 °f ..... Dome Temp./Hum. +60°f / 63% Transparency Conditions . Fine ..... 188 .....

Focus ... 505.5 .....

Spectr. Temp. +53 °f ..... Dome Temp./Hum. +47°f / 76%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
x25 kgun				BC	1200/50.7	BS	IIaO	A			OK
8032	3"	529	F2V	BC	1200/50.7	BS	IIaO-E	A	Archive		fine
6521	2"3'	7.39	M5III	"	"	"	IIaO-E	A	Archive	are doubled in blue	fine Hg lines
							IIaO-E				
6297	10"4"	6.86	F, III	BC	1200/50.7	150μ	IIaO-E	A	rG/Fe Pgm	* comp sl ℄ 3 sec set 509 T=54°f	good, sl. uneven
				"	"	"	IIaO	A		set 509 T=53°f	ok
				"	"	"	IIaO	B		"	sl red

189

Emulsion Batches:

Date May 29-30/85. Observers Lgt - Ri - KK

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49092	MOON			22:18					
	MOON					1h 53 W			
	HD 123782	14 04.6	+49° 56	22: 38	23 33	1h 42 W	+49° 50	Fe/Ne W66+OP10	1 sec
	HD 158633	17 25.3	+67° 24	23:53	00: 24	0h 48 E	+67° 23	Fe/Ne WR 66+OP13	1 SEC
	HD 201091	21 02.4	+38° 15	00: 40	00:58	3h 55 E	+38° 44	"	"
	HD 201091	21 02.4	+38° 15	01:04	01 25	3h 28 E	+38° 44		
	FLAT FIELD 10 SEC								
	FLAT FIELD 8 SEC								
	FLAT FIELD 7 SEC								
	FLAT FIELD 7 SEC								
	DARK 60 MIN.			01:50	02:50				
	DARK 60 MIN.			02:53	03:53				

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions .. hazy + cirrus clouds PD

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

WINDOW HEATER AT 5 VOLTS

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
DO FILTER											
30 000											1033
60 000											1938
60599	3"	V= 5.2	M2 IIaB	RETICON	1200/50.6	250/.5			STD UBL	V FILTER OVER SLIT	3850
6000	3"	V=6.3	dK1 or G9V	"	1200/50.6	250/.5			ASM SP/KK	filled up Reticon - N_2	169
6001	3"	V=5.1	K5V	"	"	"			ASM SP/KK	"	253
3660	3"	V=5.1	K5V	"	"	"			ASM SP/KK	" clouds - forced to stop	145
				"							2835
				"							2429
				"							2171
				"							1969
				"							19
				"							4

191

Emulsion Batches:

Date May 30-31/85 Observers Lgt - R

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49093	FOCUS TESTS (1,2,3), 1,2 (5 sec), 3 (3 sec), 4 (2 sec), 5 (2 sec)						T = -142.0 °C		
	MOON			21:21.5	21:24				
	MOON			21:31.5	21:31.8				
	HD 146051	16 09.1	-3° 26	21:45	21:57	2h 00 E	-3° 35	Fe/Ne WR	66+ opx /sec
	HD 146051	16 09.1	-3° 26	22:01.5	22:16	1h 41 E	-3° 35	"	"
	HD 146051	16 09.1	-3° 26	22:20.5	22:22	1h 35 E	-3° 35	"	"
	HD 161096	17 38.5	+4° 37	22:33.5	22:44	2h 42 E	+4° 38	"	"
	HD 161096	17 38.5	+4° 37	22:49	23:04	2h 22 E	+4° 38	"	"
	HD 161096	17 38.5	+4° 37	23:08.5	23:11	2h 15 E	+4° 38	"	"
	FOCUS TEST (1 sec)								
	FOCUS TESTS (5 sec) (4 sec)								
	HD 159561	17 30.3	+12° 38	23:	23:			"	"
	FOCUS TEST (1 sec)								
	FLAT FIELD (7 sec)								
	FLAT FIELD (9 sec)								
	FLAT FIELD (9 sec)								

Spectr. Temp. ..... Dome Temp./Hum. 64°F/100%+ Transparency Conditions haze 192

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. 63°F/100%+

outside hum ≈ 90%

WINDOW HEATER AT 10V

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
0 FILTER											
62474	3"			RETICON						V Filter over slit	3562
4134	3"			"						"	262
35027	3"	V=2.72	Mo.5III	"	1200/50.6	250/.5			STD VEL	"	3105
23011	3"	"	"	"	"	"			"	"	2137
2219	3"	"	"	"	"	"			"	"	185
23020	3"	V=2.77	K2III	"	"	"			STD VEL	"	1287
35007	3"	"	"	"	"	"			"	"	2042
3821	3"	"	"	"	"	"			"	"	223
										"	
Hα					1200/42.5	250/.5					
	3"	B=2.2	A5III						ASM-SP/eK	closed up due to ~~thickening~~ clouds	
T=	-14.2									- filled up Dewar with N_2	
											1521
											1895
											1719

193

Emulsion Batches:

Date May 30-31/65 Observers Lgt - Ri

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
	FLAT FIELD (9 sec)								
	DARK (15 min.)			23:57 ~~23:15~~	00:12 ~~00:16~~				
	DARK (1 min.)			00:15	00:16				
	FOCUS TEST (4 SEC)								
	HD 159561	17h 30.3	+12° 38'	00:33	00:37	0h 40 E	+12° 39	Fe/Ne WR	66+0 pic/sec
	"	"	"	00:41 20	00:41 43	0h 37 E	+12° 39	"	"
	FLAT FIELD (15 SEC)								
	FLAT FIELD (15 SEC)								
	FLAT FIELD (15 SEC)								
	FLAT FIELD (15 SEC)								
	HD 201091	21 02.4	+38° 15	01:06.5	01:54	2h 55 E	+38 45		
	DARK (50 MIN)			02:02.5	02:52.				
	DARK (50 MIN)			02:55	03:45				

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions ..... 194 ....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				RETICON							1916
				"							24
				"							1
Hα				"	1200/42.5	250/.5					
10016	3"	B=2.2	A5III	"	"	"			Asm-Sp/KK		2477
1024	3"	"	"	"	"	"			"		258
											2046
											2067
											2137
											2119
25 395	3"	1=519	K5V	"	1200/50.6	250/.5			Asm-Sp/KK	-stopped -clouds & lightning	1507
				"							316
				"							14

195

Sat-Sun

Date June 1-2/85 Observers BT-RL

7"69°

Emulsion Batches: IIIa-F. IIIa-J-26D. 55..

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49094	HD 190390	19 59.6	-11 53	23:47	03 51	0 12W	-11 30	—	—
49094T	√ EPOCH PLATE				1 SMILE NOLTA	D D1 390D	D3 430m	D2 440m	

Spectr. Temp
Focus..50
Spectr. Temp

Exp. Mtr. 800

Spectr. Temp. 64°F ..... Dome Temp./Hum. 15°C / 77% Transparency Conditions ..... 196 ..

Focus .. 506.5 .....

Spectr. Temp. 61°F ..... Dome Temp./Hum. 13°C / .92

Comparison Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
— —	8008	3"	6.86	F III	BC	1200 / 50.7	150μ	IIaO-E IIaO-E	A	1G/Fe Pgm	BOTH ED PLATES Fe arc not functioning	no Fe arc good exp!

197 Mon-Tues

Date June 3-4/85 Observers EH-RI

Emulsion Batches:

7"69° IIaO.E. 19103-26055

5"68° IIIaJ. 26114-10055

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp	Exp. Mtr.
49095F	Focus Test							Fe/2	25-25	
49095	HD 86360	9 52.9	+12 55	20:30	21:31	4 06W	+12 34	Fe/2	20-20	15003
49096	HD 138749	15 28.9	+31 42	21:36	22:17	0 43E	+31 31	"	20-20	15003
49097	HD 148753	16 25.4	+42 06	22:21	23 58	0 03W	+41 58	"	8-8	15003
49097T	SPOT CAL FOR PLATES 49095+96				15MIN@D4	① 17.5V ② 13V ③ 13V 3900 4300 4810				
49098	HD 182917	19 21.9	+50 02	00 06	02 11	0 40E	+50° 16'	Fe/2	8-8	2896
49098T	SPOT CAL FOR PLATES 49097+98				15MIN@15VOLTS	① D4 ② D3 ③ D2 3900 4300 4810				
49099	HD 186155	19 37.E	+45 17	02 17	02 50	0 17E	+45 34	Fe/2	8-8	5002
49100	HD 188947	19 52.5	+34 49	02 53	03 16	0 06W	+35 08	"	8-8	5000
49101	HD 182572	19 20.2	+11 44	03 23	03 53	1 01W	+12 03	"	8-8	4999
49101F	Focus Test							Fe/-	25-2	

Spectr. Temp. 64°F ..... Dome Temp./Hum. 14°C/67% Transparency Conditions .. good ..... 198..

Focus .506 .....

Spectr. Temp. ..... Dome Temp./Hum. 8°C/85%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				BC	1200/50.7	B5	IIaO-E	A		Discarded → No comp Mark A1C	
5003	3"-4"	5.22	B9III	"	"	"	IIaJ-E	A	B/n SB	TELESCOPE LIMIT	good but uneven background
CCD3		4.10	B7aa	"	"	"	"	A	B/n SB	T=61°F F=506	sl str.
2000	4-5	6.6	M6III	"	"	"	IIaO-E	A	Obs Prgm	30 Aer: std for CH$_3$CN T=60°F F=506	fine
							IIIaF				
396		V 8.4	M1	BC	1200/50.7	B5	IIaO-E	A	Obs Prgm	CH$_3$CN T=56°F F=507	continuum very weak
							IIaD-E				
5002	~5"	5.46	F3III-IV	BC	1200/50.7	B5	IIaO-E	A	Archive	T=53°F F=508	fine
5000		4.91	K0III	"	"	"	"	A	Archive	T=52°F F=508	fine
4900		5.2	G8IV	"	"	"	"	A	Std Vel		faint
								A		T= F=508	

199

Wed-Thurs

Date June 5-6 85 Observers Lyt-Tm

5m 68°

Emulsion Batches:
IIIaJ Eq 2611.4 -17055
IIaO-E 19103 -26055

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49102	HD 137909	15 23.7	+29 27	00:00	00:28	1h 41 W	+29° 17	Fe/#2	15-15-15
49102T	Spot Calib for	49102-04,06,07			15 min	D4 3900 175V	D4 4300 15V	D4 4810 15V	
49103	HD 159561	17 30.3	+12 38	00 37	00:43	00h 10E	+12° 40	Fe/#2	22-22
49104	HD 8890	1h 22.6	+88 46	00:56	01:06	8h 47E	+89° 18	Fe/#2	22-22
49105	HD 165908	18h 03.2	+30° 33	01:21	01:49	0h 24 W	+30° 39	Fe/2	12-12
49105T	Spot Calib for	49105, 08-11		(next night)	15 min	15V D4 3900	D3 4300	D2 4810	
49106	HD 196524	20h 32.9	+14° 15	01:56	02 23	1h 32E	+14 39	Fe/2	15-15-15
49107	HD 209790	22h 00.9	+64° 08	02:32	03:29	1h 53E	+64°39	"	22-22
49108	HD 186791	~~17 38.5~~ 19h 46.5	+10° 22	03:38	03:46	0h 41W	+	"	12-12
49108F1						0	+10°	"	20 2
49108F2						0	"	"	20 2

Spectr. Temp. 63°f ..... Dome Temp./Hum. +55°f / 90% Transparency Conditions Semi-cloudy ..... 200...

Focus ..507.....

Spectr. Temp. ..56.5°f..... Dome Temp./Hum. +50°f / 97%

Comparison Type/Filter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	25685	2-4"	3.93	Fop	EC	1200/507	BS	IIIaJEfg	A	Hsm Sp kk	some cloud	fine
								IIIaJEfg				
	26805	2-3	2.2	A5II	BC	1200/507	BS	IIIaJEfg	A	Hsm Sp kk		fine
	25963	"	2	F	"	"	"	IIIaJEfg	A	"		fine
	7164	2-3	5.5	FTV	"	"	"	IIIaO-E	A	"	T=62°f	fine
								IIIaO-E				
	27617	2-3	V= 3.78	F5IV	BC	1200/507	BS	IIIaJ-Efg	A	Hsm Sp kk		fine
	30966	2"	4.63	A3m	"	"	"	IIIaJEfg	A	"		fine
	6244	3"	4.1	K3II	"	"	"	IIIaO-E	A	Std Vel		fine
					"	"	"	IIIaO	A		set 507 T=56.5°f	right on
					"	"	"	"	B			centered
					kk - You may be disappointed that I did a IIIaO spot that was pale							
					not needed by you. I have also the last 4-5 frames a bit of sunset / remaining							
					strips. I am plating the Uranium box in vacuum & continue using it soon							
					hold on the IIIaO developer. Gotta I evaporated a full IIIaO box tonight too.							

201 Thurs-Fri

Date June 6-7/85 Observers BT-Tn

Emulsion Batches: IIaO-E 19103 – 26055

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
49109F	Focus Test					≈ 0 W	+5 38	Fe/2	20-10	
49109	HD115521	13 12.6	6 00	20 34	21 12	0 39 W	"	Fe/2	12-12	5079
49110	HD145753	16 25.4	+42 06	21 17	22 01	1 42 E	+4202	"	8-8	5122
49111	HD182917	19 21.9	+50 02	22 07	03 33	1 06 W	+50 19	"	8-8	4020

Spectr. Te
Focus ....
Spectr. Te

Spectr. Temp. 64°F ..... Dome Temp./Hum 61°F/70% Transparency Conditions Fine - sl hazy 202

Focus ..... 506 .....

Spectr. Temp. 57°f ..... Dome Temp./Hum 52°f/94% .....

Comp. Type Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/2					BC	1200/507	BS	IIaO	A		Set 506 Cooler/red	
Fe/2	5079	~12"	50	M2IIIa	BC	1200/50.7	BS	IIaO-E	A	Std Vel		fine
"	3122	1-3'	656	M6III	"	"	"	"	A	Obs Pgm		fine
"	4020	1-3-2"	8.4	M6	"	"	"	"	A	Obs Pgm		good

203 June 8/9

Date 1935/06/08-09 SAT/SUN Observers B.M.-T.M.

Emulsion Batches: Tri-X Eff. 2614-17055

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49112	HD133749	15h28m.9	+31° 42'	23:14	00:05	01:25W	+31° 29'	Fe/2	15-15
49112T	Spot Cals for 49112				15min @ 15V	DA	17.5V 3900	15V 4300	15V 4810

Spectr. Te
Focus ..
Spectr. T
Exp Mtr.
22997

Spectr. Temp. 69°F ..... Dome Temp./Hum. 62°F/86% Transparency Conditions Heavy. Cloud at end 204

Focus 505

Spectr. Temp. 68°F ..... Dome Temp./Hum. 61°F/80%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
22897	2-3	4.10	B7nn	BC	1200/50.7	B5	IIIa-JEfg	A	SB-B1n	T=69°F Focus=505	Fine
							IIIaJEfg				

905 Sun-Mon

Date June 9-10/85 Observers BT-Tn

Emulsion Batches: 7m68IIaO-E ... 19103 - 06065

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr
49113F1	Focus Test					0 00	+32 52	Fe/2	20-26	
49113F2	Focus Test					"	"	"	20-26	
49113	HD188119	19 48.5	+70 01	20 45	21 16	5 36 E	+70 18	"	12-12	6147
49114	HD8890	1 22.6	+88 46	21 24	21 29	12 06 E	+89 17	"	12-12	7623
49115	HD188119	19 48.5	+70 01	21 34	22 01	4 52 E	+70 18	"	12-12	8566
49115T	Spot Calib for 49113		+20		15m/m @ 15V	3 00	4 00	Fe/2	4 00	
49116	HD196379	20 31.9	+51 31	22 08	00 14	3 24 E	+51 53	Fe/2	8-8-8	5524
49117	HD161096	17 38.5	+4 37	20 24	00 35	0 11 E	+4 39	"	12-12	7490
49118	HD204724	21 25.4	+23 12	00 40	01 55	2 36 E	+23 41	"	12-12	5569
49119	HD165908	18 03.2	+30 33	02 00	02 26	1 16 W	+30 39	"	12-12	7361
49120	HD206330	21 36.3	+42 49	02 30	03 50	0 53 E	+43 18	"	8-8-8	6554

Spectr. Temp. 72.5°F ..... Dome Temp./Hum 65°F/66% Transparency Conditions . Hazy - Fine ..... 2066.

Focus . 504 .....

Spectr. Temp. . 61°F ..... Dome Temp./Hum. 54°F/85%

good Aurora tho haze by 23h

Comparison Type Filter Exc.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/2 20								IIaO	A		cvs red	
4 20								"	B		c. Red	
12	8147	3"-4	4.72	G7III b	BC	1200/30.7	BS	IIaO-E	A	Archive	Fe arc on stellar	Exp OK
12	7623	"	2	F	"	"	"	"	A	KK Asm		fine
12	8566	3"-6	4.72	G7III b	"	"	"	"	A	Archive		fine
								"				
Fe/2 8	5084	3"-5"	6.52	A9II	BC	1200/30.7	BS	IIaO-E	A	Archive	some cloud vs wk	
16	7490		3.9	K2III	"	"	"	"	A	Std Vel	T=66°F E=55	fine
16	8069		6.19	M1III	"	"	"	"	A	Archive		fine
12	7861	2"-3"	5.5	F7V	"	"	"	"	A	KK Asm		fine
16	6084	2"-6"	6.71	M1III b	"	"	"	"	A	Archive	Set 506 T=62°	fine

207 Mon-Tues

Date June 10-11/85 Observers BA-Tn

Emulsion Batches: 7"68° IIaO-E 06114 -10065

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
49121	HD125111	14 12.3	+40 12	20:37	23:02 (21 10)	1 46W	+39 52	Fe/#2	8-8-8	8032
49122	HD160365	17 34.4	+13 23	23:11	00 35	0 03E	+13 27	V1	8-8-8	5524
49122T	Spot Cals	for 49121	-22		15min @	15V D4 3900	D3 4300	D2 4810		

Spectr. Temp. 67°F ..... Dome Temp./Hum. 61°F/62% Transparency Conditions . getting cloudy 208

Focus 505

Spectr. Temp. 62°F ..... Dome Temp./Hum. 55/77%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
8032	2-3"	674	F2IV	BC	1200/507	BS	IIa-O-E	A	Archive-BS	cloud 20:20-21:40 fine	
5524	3-6"	668	F6III	"	"	"	"	A	Archive	some cloud	s/wk
							"				

209 Fri Sat

Date June 14-15/85 Observers ... Tn - Kly

Emulsion Batches:
6" 68 H90-E 0611.4 - 10065

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49123	HD 66751	7h 59m 9	+70° 0′	20:48	21:56	7 03 W	+69°40′	Fe/	8-8-8
49124T	Spot Calc for	49123-24				15 min @ 15V	D4 3900	D3 4300	D2 4810
49124	HD 8890A	L22.6	+8846	22:03	22:05	1 10 E	+89 11	Fe/-	12-12
Polaroid	C1 +88° BD 2	01 3.2 telescope	+89 25 telescope	23 58	01 27		+8925		
	C4 +88°	03 42.5		1 39	02 27		+8906		
Theirs	C4 ?	04 07.8		2 37	03 27		+8855		
				kk Note - Check field - seems, as I believe					
				that C4 on Polaroid field is actually BD 88° 11					
				C4 is the one I circled.					
							Tn		
				Note Polaris at down RA	1" 33.3		≈ +89	11	
RS	1700/41.5	focus test	(with revised RS)	set 505	T = 62.5°F				

Spectr. Temp. 62°F Dome Temp./Hum. 58°F / 69% Transparency Conditions Fine 210

Focus 5.07

Spectr. Temp. ..... Dome Temp./Hum. 50° / 85%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
35c	1-2"	V= 6.48	dF8	BC	1200/ 50°8	BS	IIaO-E	A	KK Hms,	reversed vs/at	
							IIaO-E				
7478	1-2"	2	F	BC	1200/ 50°8 α1950	BS δ1450	IIaO-E	A	KK Hms,		G, e
	SAO	2	0000	75	0 24.7	8910	IIaO			bad guiding/trail	
	SAO	2	000	480	2 49.7	8855	"			only good way to	
	SAO	2	000	541	3 18.8	8846	"			trail is to turn off	
										drive ; all future	
										edges of the area	
										must be done like	
										last 2 edges posted	
										by fast motion east	
										& for th.	
To/KK											OK

From Palomar print overlay

211 Tues Wed

Date June 18-19 85 Observers KK-Tm

Emulsion Batches:
4½ G5 IIIa F - 18065
4 G5 098-02 E - 12065

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49125	BS 5264	13 56.6	+2 02	20 21	21 00	0 30 W		—	—
49126	HD 139006	15 30.5	+27 03	22 15	22 22	0 20 W		Fe/—	20 - 20
								No/—	20 - 20
49127	"	"	"	22 27	22 37	0 35 W		Fe/—	10 - 10
								No/—	10 - 10
49128	HD 182917	19 21.9	+50 02	23 00	00 35	E		Fe/—	7-7
								No/—	7-7
49127T	Spot Calib for	49125-27			15 min e	15V D4 4810	7V D2 Hα	7V D2 5450	
49128T	Spot Calib For	49128			15 min e	15V D3 4810	7V D1 H+	7V D2 5450	

Spectr. Temp. 63°F Dome Temp./Hum. 57°F/80% Transparency Conditions Some clouds 212.

Focus 505

Spectr. Temp. 59°F Dome Temp./Hum. 53°F/90%

Comparison Type/Filter/Exp.	Exp. Mtr. no filter	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	100000		4.36	113V	BC	1200/41.5	RS	IIIaF	A	RS test		sl weak no sky
	02261	3-5	2.2	AOV	"	"	"	"	A	"		good Na ok Fe ok
	100015	3-5	"	"	"	"	120/7	"	A	slit test		sl weak
	41000	3"	~9	IIIb	BC	1200/41	BS	098 02E	A	Obs prog	T=59°F Set 508	fine
								IIIaF				"
								098-02E				"
											RS spectra are narrow - only 0.5 mm - why?	
						(tilt should be 40.5)						

713

Date WED-THURS JUNE 19-20/81 Observers Gry - R.

Emulsion Batches:
IIaF+2415+1705S
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp	Exp. Mtr.
49129F	FOCUS TEST							Fe/UV26	25-25	
49129	HD 127762	14 28.1	+38°45	20:40	20:49	0h07E	+38°26'	"	15-15	30000
49130	HD 124675	14 9.9	+52°15	20:56	21:27	0h50W	+52°00	"	15-15	30000
49130?	SPOT CAL FOR PLATES 49129 - 49138				15MIN@D4	3900 @17.5V 4300 @15V	4010 @15V			
49131	HD 125161	14 12.6	+51°50	22:00	22:48	02h07W	+51°32	Fe/UV26	15-15	30000
49132	HD 129502	14 37.8	-05°13'	22:56	23:54	00h46W	-05°30	Fe/UV26	15-15	30000
49133	HD 147547	16 17.5	+19°23	00:01	00:27	01h40W	+19°20	"	15-15	30000
49134	HD 175639	18 51.3	+04°04	00:33	01:56	00h36W	+04°17	"	15-15	30000
49135	HD 175638	18 51.2	+04°04	02:30	02:54	01h35W	+04°17'	"	15-15	30000
49136	HD 187642	19 45.9	+08°36	03:02	03:04	00h50W		"	22-22	30000
49137	HD 182640	19 20.5	+02°55	03:09	03:35	01h46W	+03°14	"	15-15	30000
49138	HD 203280	21 16.2	+62°10'	03:42	03:48	00h05W	+62°35	"	22-22	30000

Spectr. Temp. ..65°F..... Dome Temp./Hum. ...17°C....67% Transparency Conditions .SOME CLOUDS AROUND...214

Focus ...505 – 506.....

Spectr. Temp. ...59°F..... Dome Temp./Hum. .12°C....82%

Comparison Type	Filter	Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/Ne		25-25					B.C.	1200/50.7	B.S	IIaO	A		T=65°F SET=505	
"		5.-	30000		3.22	A7III	B.C.	1200/50.7	B.S.	IIIaF+f	A	A* GRAY		fine
"		15-15	30000	2-3	4.74	A8IV	BC.	1200/50.7	B.S.	IIIaF+f	A	"		fine
										IIIaF+f			CLOUDS	
Fe/Ne		15-	30000		4.95	A9V	B.C	1200/50.7	B.S.	IIIaF+f	A	A*GRAY		exp fine dust on plate
Fe/Ne		15-	30000	3	4.26	F2III	"	"	"	"	A	"	T=63°F S=506	fine
"		15-	30000		4.02	A9III	"	"	"	"	A	"		fine
"		15-	30000	3-4	5.18	A5Vn	"	"	"	"	A	"		"
"		15-	30000		4.79	A5	"	"	"	"	A	"		"
"		22-	30251		0.99	A7V	"	"	"	"	A	"		fair
"		15-	30102		3.68	F3IV	"	"	"	"	A	"		fine
"		22-	31192		2.66	A7V	"	"	"	"	A	"	T=59°F SET=506	fine

25

Emulsion Batches: 5"68° ~~Tri-X~~ 2614-07065

Date THURS.-FRI. JUNE 20-21/85 Observers . GRY.-RI.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49139F	FOCUS TEST							Fe/WR6	25-25
49139	HD 137391	15 20.7	+37° 44	20:44	21:00	00" 35E	+37° 32	Fe/WR6	15-15-1
49140	HD 113139	12 56.4	+56° 54	21:16	22:12	00" 50W	+56° 31	Fe/WR6	15-15-
49141	HD 138749	15 28.9	+31° 42	22:18	22:38	00" 45W	+31° 30'	Fe/WR6	15-15-1
49142 ✓	HD 147449	16 17.0	+01° 16	22:44	23:52	01" 10W	+01° 13	Fe/WR6	15-15-
49143T	SPOT CAL FOR PLATES 49139-			15 MIN @ D4	① 11.5V 3900	② 15V 4300	③ 15V 4910		
49143	HD 164259	17 55.2	-03° 41	23:59	01:15	00" 55W	-03° 37	Fe/WR6	15-15-1
49144	HD 173648	18 41.3	+37° 30'	01:26	01:51	00" 46W	+37° 41'	Fe/WR6	22-22
49145	HD 181333	19 15.0	+12° 11	01:55	03:26	01" 47W	+12° 27	Fe/WR6	15-15-1
49146	HD 202444	21 10.9	+37° 37	03:32	03:48	00" 15W	+38° 08	Fe/WR6	22-2

Spectr. Temp. ..65°F..... Dome Temp./Hum. ..16°C....78% Transparency Conditions ..EXCELLENT.....216.

Focus .....505 - 506.....

Spectr. Temp. ..60°F..... Dome Temp./Hum. .....13°C....74%

Comparison Type/Filter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
					B.C.	1200/50.7	B.S	IIaO	A		☿=65°F F=505	
Fe/	35023	2	4.62	FOV	B.C.	1200/50.7	B.S.	IIIaJ+f	A	Gray Proj		Fe sl wk fine
Fe/	35186		5.29	F2V	B.C.	1200/50.7	B.S.	IIIaJ+f	A	"		Fe sl wk fine
Fe/	35031		4.10	B2nn	B.C.	1200/50.7	B.S	IIIaJ+f	A	Bc-Bl	☿=63°F F=506	fe sl wk fine
Fe/	35001	2-3	5.16	FOI	B.C	1200/50.7	B.S.	IIIaJ+f	A	Gray Proj		fe wk fine
								IIIaJ+f				
Fe/	35080	2-3	5.00	F2IV	B.C	1200/50.7	B.S.	IIIaJ+f	A	Gray-Proj	☿=62°F	fine
Fe/	35087	2	4.55	Am	B.C.	1200/50.7	B.S.	IIIaJ+f	A	"		fe sl wk Fe fine
Fe/	35139		5.79	FOIII	B.C.	1200/50.7	B.S.	IIIaJ+f	A	"	☿=61°F	fine
Fe/	35139	2	4.11	F2IV	B.C.	1200/50.7	B.S	IIIaJ+f	A	"	☿=60°F	fine

217

Date FRI/SAT JUNE 21/22 85 Observers Lgt - Ri

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49147	FOCUS TEST	1 sec,	1 sec., 2 sec.	2 sec,	2 sec., 2 sec.,	3 sec, 3 sec.		(last), 3	sec, 3
	HD 136202	15h 14.2	+2° 09'	22:02	22:29	0h 54 W	+1° 56'	Fe/Ne wide	1 sec +ND1.0
	HD 159561	17h 30.3	+12° 38'	22:40	22:44	1h 07 E	+12° 43'	"	"
	HD 159561	"	"	22:49	22:50	1h 00 E	+12° 43'	"	2 sec
	HD 182640	19h 20.5	+3° 55'	23:03	23:14	2h 27 E	+3° 13'	"	2 sec.
	FLAT FIELD (15 SEC)								
	FLAT FIELD (15 SEC)								
	FLAT FIELD (10 SEC)								
	FLAT FIELD (10 SEC)								
	FLAT FIELD (10 SEC)								
	FLAT FIELD (10 SEC)								
	DARK (60 minutes)			23:40	00:40				
	DARK (60 min.)			00:43	01:43				
	DARK (1 min.)			01:45:30	01:46:30				
	DARK (1 min.)			01:47:30	01:48:30				
	FOCUS TEST	3 sec, 5 sec, 5 sec, 3 sec, 3 sec							

Spectr. Temp. ..... Dome Temp./Hum. 63°F/80% Transparency Conditions ... hazy ... 218.

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. 60°F/80%

Comparison Type/Filter	Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
(out)		c. 3 sec	3 sec			RETICON	1200/~~425~~	250	T = -150.3				
Fe		Hα 3517	3-4"	V=5.26	F8 IV-V	"	"	~~259~~ 295			STD VEL	T=-150.1 -clouds	938
"		10052	"	V=2.08	A5 III	"	"	"			ASM-SP/KK		2593
"		1030	"	"	"	"	"	"			"		273
"		707	"	V=3.36	F0 IV	"	"	"			"	clouded over completely	193
													324
													3194
													2134
													2115
													2293
													2164
												T = -149.9	24
													21
													1
													-1

219

Date Sun./Mon. June 23/24 1965 Observers Lgt - Ri

Emulsion Batches:
T 68° IIaO E 06 11 F-10065
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49148F	FOCUS TEST							Fe/WR6	25 2[illegible]
49148	HD8890 (Blank)	1h 22.6	+88° 46'	21:04	21:08	11h 32 E	89° 20'	"	12-1[illegible]
49149	HD 8890	"	"	21:10	21:18	11h 23 E	"	"	12-12
49150	HD 122742	13h 58.6	+11° 16'	21:27	22:55	2h 44 W	11° 00'	"	6-10-2[illegible]
49150T	SPOT CAL FOR PLATES 49148-				1 SHUTTER 15 VOLTS	0 D4 3900	2 D3 4300	3 D2 4810	

Spectr. Temp. ...73..... Dome Temp./Hum. ...70°F/66%... Transparency Conditions Some cloud, [illegible] 120 fair, clear ~27° windy

Focus ...504.....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
							IIaO	A			ok
7709	3-4"	2	F	BC	1200/50.7	BS	IaUe	A	osm 50/kk		fair
7530	"	"	"	"	"	"	"	A	"	broken clouds during exposure	fine
3299	"	6.8	68 ▽	"	"	"	"	A	"	cloud	sl weak
							IIa-E				ok

Comparison Type Filter Exp

221 Fe in 24,0 out to 00150

Date MON-TUES JUNE 24/25/85 Observers ... Ri ... 5m 68°

Emulsion Batches:
IIaDE 0611A-10065
IIIaJ+e 2611A-07065

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
49151F	FOCUS SPOT							Fe/WR6	25-25	
49151	HD 136202	15 14.2	+02° 09	20: 48	21: 16	00h 09E	+01°54	Fe/WR6	8-8-8	7or8
49152	HD 138 749	15 28.9	+31° 42'	21: 21	21: 53	00h 15 W	+31° 33	Fe/WR6	15-15-15	4or5
49152T	SPOT CAL FOR PLATES 49152-54				15MIN@24	ⓓ 17.5V 3900	ⓑ 15V 4300	ⓑ 15V 4810		
49153	HD 164852	17 58.1	+20° 50	21: 59	23: 43	00h 25 E	+20° 56	Fe/WR6	15-15-15	35 006
49154	HD 137909	15 23.7	+29° 27	23: 48	00: 18	02h 46 W	+29° 14	Fe/WR6	15-15-15	30025

Spectr. Temp. ..67°F..... Dome Temp./Hum. 17°C...../53% Transparency Conditions ...good..... 222

Focus .....505 - 506.....

Spectr. Temp. ..... Dome Temp./Hum. 13°C / 67%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				B.C.	1200/50.7	B.S	IIaO-E	A		T=67°F F=505	
7002	3	5.6	F8 IV-V	B.C.	1200/50.7	B.S	IIaO-E	A	STD. UEL		
40045	3	4.10	B7nn	B.C.	1200/50.7	B.S.	IIIaJ+f	A	Bc - B1c	T=66°F	fair
							IIIaJ+f				✓
35006	3-4	5.19	B3IV	BC	1200/50.7	B.S	IIIaJ+f	A	SB - B1c		
30025	3-4	3.93	Fop	B.C.	1200/50.7	B.S.	IIIaJ+f	A	AstSp/4K	LIGHT STRUCK T=63°F F=506	

#3 Tues-Wed

Date June 25-26/85 Observers BH-RL

Emulsion Batches:
IIaO-E 06114=10065
4"x5" 098-02E 093-12065
IIaO-E 06114-25065

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
49155F	Focus Test					0 00		Fe/WR6	25-25	
49155	HD125019	14 11.8	+53 00	20 41	21 47	1 31W	+52 42	Fe/WR6	8-8-8	5410
						① D4 ② D3		③ D2		
49155T	SPOT CAL FOR PLATES 49155-				15MIN@15VOLTS	3900	4300	4910		
49156	HD148783	16 25.4	+42 06	21 58	22 07	0 21E	+42 00	Fe/—	7-7-7	4176
								Ne/—	7-7-7	
49157	"	"	"	22 12	22 37	0 07W	"	Fe/WR6	8-8-8	4561
						① D3,15U ② D1,7U ③ D2,7U				
49157T	SPOT CAL FOR PLATES 49156,58				15MIN	4810	Hα 54	50		
49158	HD182917	19 21.9	+50 02	22 44	23 55	1 28E	+50° 21'	Fe/—	7-7-7	4619
								Ne/—	7-7-7	
49158F	FOCUS TEST							Fe/—	20-20	
								Ne/—	20-20	
	CH Cyg with GS at 50.7°C +1.4 is unattainable tonight on IIaO									
49159	HD198026	20 42.5	-5 24	00 21	01 58	0 49E	-4 58	Fe/WR6	8-8-8	5000
49160	HD201251	21 03.2	+47 15	02 06	02 53	0 12E	+47 40	"	8-8-8	5000
49161	HD8890	1 22.6	+88 46	03 05	03 07	5 27E	+89 18	"	12-12	5148
49162	"	"	"	03 12	03 15	5 20E	"	"	12-12	2-15
49163	HD212943	22 22.8	+4 12	03 37	04 01	0 26E	+4 44	"	8-8-8	2500

Spectr. Temp. 67°F..... Dome Temp./Hum 15°C/60% Transparency Conditions high cloud..... 224

Focus .. 505 - 506.....

Spectr. Temp. .. 58°F..... Dome Temp./Hum. 11°C/90%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
										Vs/rel	
8000		668	A4V	BC	1200/50.7	BS	IIaO-E	A	Archive-BS		fine
							IIaO-E				✓
41176		6.56	M6III	B.C.	1200/40.5	B.S	098-02E	A	OBSERV PROG.	ϑ=65°F F=507	fine
4501	3	"	"	B.C.	1200/50.7	B.S.	IIaO-E	A	"	ϑ=65°F F=505	fine
							098-02E				✓
41019	3-4	V 8 4	M6	B.C.	1200/40.5	B.S.	098-02E	A	OBSERV PROG	ϑ=65°F F 507	fine
				"	"	"	"	A		ϑ=63°F F=507	
										ϑ=63°F F=506	
5000	3-4	641	K5III	BC	1200/50.7	BS	IIaO-E	A	Archive		fine
8000	3	6.12	K4IIb-IIa	"	"	"	"	A	Archive	ϑ=61°F	fine FK5147+F 6-0
5248		~2	F	"	"	"	IIaO-E*	A	KK Asm 50		
8225		"	"	"	"	"	"	A	KK Asm 50		fine
3500	3-4	3.9	K0III-IV	"	"	"	IIaO-E*	A	SK Vel	ϑ=53°F	slwk

225 Wed-Thurs

Date June 26-27/85 Observers B.T.-T.H.

7" 68°
4" 68°

Emulsion Batches:
IIaO-E 06114 -25065
098-02E 093 -12065

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49164	HD147266	16 15.7	+21 22	20 39	21 44	0 32E	+21 16	Fe/w6	8-8-8
49164T	Spot Calib for	49164, 67-68		15 min @ 15V	D4 3900	D3 4300	D2 4810		
49165	HD182917	19 21.9	+50 02	21 52	00 10	1 11E	+50 19	Fe/ Ne/	7-7-7 7-7-7
49165T	Spot Calib For	49165, 66.		15 min @	15V D3 4810	7VD1 Hα	7VD2 5450		
49166	HD148783	16 25.4	+42 06	00 14	00 21	1 56W	+42 00	Fe/ Ne/	7-7-7 7-7-7
49167	HD5690	1 22.6	-55 46	00 30	00 33	7 58E	+89 17	Fe/D6	11-11
49168	"	"	"	00 37	00 39	7 53E	"	"	11-11

Spectr. Temp 66°F ..... Dome Temp./Hum 65°F/60% Transparency Conditions Some cloud from East 22h

Focus 505 .....

Spectr. Temp. 65°F ..... Dome Temp./Hum 60°F/80%

Comparison Type/Filter	Comparison Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/ur6	5-8-8	8004	1"	6.99	G7 IIIb	BC	1200/507	BS	IIaO-E	A	Archive-BS		Fine
									IIaJ E				✓
Fe/Ne	7-7-7	41170	1-2"	V 8.4	M6	BC	1200/40.5	BS	098-02E	A	Obs Pgm	cloud 22:15-23:38	Comp 5/5 Lamp OK
									098-03E			(Flexure)	✓
Fe/Ne	7-7-7	43275	1	6.56	M6 III	BC	1200/40.5	BS	098-02E	A	Obs Pgm		Comp 5/5 Stars 5/5
Fe/Ne	1-1-1	8042	1-2	~2	F	"	1200/507	"	IIaO-E	A	KK Asm 5p		Fine
"	11-1	8118	2	"	"	"	"	"	"	A	KK Asm 5p	cloud	Fine
							KK Only 2 objects						

IIIa Thurs-Fri

Date June 27-28/85 Observers Lgt - Tn

8m 68° Emulsion Batches:
5m 65° IIIaO-E 06114 -25065
IIIaJ-E -07065

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.	Exp. Mtr.
49169	HD 103095	11h 47.2	+38° 26'	20:49	22:53	5h 08 W	+37° 57'	Fe/Ne 6	8-8-8	218
49169T	Spot Calib for	49169-72, 75-78,			15 min @ 15V	D4 3900	D3 4300	D2 4810		
49170	HD 140538	15h 43.0 39.1 Tn	+2° 50'	23:01	01:16	3h 40 W	+2° 37'	Fe/Ne 6	8-8-8	
49171	HD 137909	15h 22.7	+29° 27'	01:23	01:33	4h 14 W	+29° 16'	"	11-1	
49172	HD 165908	18h 03.2	+35° 33'	01:38	02:04	2h 04 W	+35 40	"	11-1	
49173	HD 159561	17h 30.3	+12° 38'	02:09	02:16	2h 49 W	—	"	21-2	
49174	HD 182640	19h 20.5	+2° 55	02:20	02:51	1h 35 W	+3 10	"	21-	
49174T	Spot Calib for	49173-74,			15 min @ D4	17.5V 3900	15V 4300	15V 4810		
49175	HD E890	1h 22.6	+88° 46'	03:02	03:05	5h 22 E	+89° 19'	"	11-1	
49176	"	"	"	03:10	03:12.5	5h 15 E	"	"	11-1	
49177	HD 204867	21h 26.3	-6° 01'	03:21	03:27	00h 04m W	-5° 35'	"	11-1	
49178	HD 196524	20h 32.9	+14° 15'	03:41	03:48	1h 20 W	+14° 41'	"	11-1	
49178F	Focus test							"		

Spectr. Temp. 70°F Dome Temp./Hum. 66°F/61% Transparency Conditions ...

Focus 505

Spectr. Temp. 62.5 Dome Temp./Hum. 58°F/88%

Noticed a few very slow meteors last night from south or SW

Comparison Type/Filter	Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
		6018	2-3"	7.2	G8 VI	B.C.	1200/50.7	BS	IIaO-E	A		04 18V	fair-v slwk
									IIaO-E			One corner missing	v
		5326	2½"	6.55	dG5	B.C.	1200/50.7	BS	IIaO-E	A			Fair sl sh- v wk
		6030	3"	3.93	F0p	"	"	"	IIaO-E	A	"		f.c
		5995	2"	5.5	F7V	"	"	"	IIaO-E	A	"		f-p
		29596	2"	2.2	A5	"	"	"	IIIaJ-E	A	"		sl str
		35500	2	3.68	F0 IV	"	"	"	IIaJ-E	A	"		f-p
									IIIaJ-E				v
		6046	2"	2	F	"	"	"	IIaO-E	A	"	65° F	f-p
		6320	"	"	"	"	"	"	"	"	"		f-p
		6000	"	3.7	G0 Ib	"	"	"	"	A	STD VEL		f-p
		6193	"	V=3.78	F5 IV	"	"	"	"	"	asm-Sp/KK		
						"	"	"	IIaS-E	1		sol 505 T 628°	mod v sl/diff

229

Sol - Sun

July 2 05m @ 68°

Emulsion Batches: IIIaJ-E 25065 C9602E 15103 - 28065

Date July 29-30 1905 Observers T.C.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
49179	HD 138749	15 28.9	+31 42	20 43	21 27	0 9 W	+31 29	Fe/w 6	21-3
						17.5V	15V	15V	
49179T	Spot Calc for	49179-80			15 min @ D4	3900	4300	4 8:0	
49180	HD 164852	17 58.1	+20 50	21 33	23 27	0 20 E	+20 58	Fe/w 6	4-1-7
49181	HD 182917	19 21.9	+50 02	23 35	00 52	0 16 E	+50 21	Fe/—	7-7
					15V D3	7V D1	7V D2	Ne/—	7-7
49181T	Spot Calc for	49181 — [illegible]2,85			15 min @ 4810	H+	5450		
49182	HD 148783	16 2.4	+42 06	00 58	01 09	2 57 W	+42 01	Fe/—	10 "
								Ne/—	10 "

Spectr. Te
Focus...
Spectr. Te
Exp Mtr

Spectr. Temp. 67°F Dome Temp./Hum. 64°F/89% Transparency Conditions Some cloud 230

Focus 505

Spectr. Temp. 64° Dome Temp./Hum. 50/97%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Done	2-3"	4.10	B7 III a	BC	1200/5.07	BS	IIIa J-E	A	Be-Blh	(Ok for Blh)	fair
							IIIa J-E				
	2"	5.19	B3 IV	BC	1200/5.07	BS	IIIa J-E	A	SB Blh		f-e
	2-3"	~9	M b	"	1200/4.05	BS	098-02E	A	Obs prgm		F-e
							098-02E				
	2"	6.56	M5 III	BC	1200/4.05	BS	098-02E	A	Obs prgm Std		fine
									Note IIIa J 098s s/l fogged		

231 Sun-Mon

Date June 30-July 1, 1885 Observers BH-TH

July 2/85 -7" @ 68°f Emulsion Batches: IIaO:E...0611.4.:2.7065

4" @ 68°f 098.02E.15103.:28065

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49183	HD 8890	1 22.6	+88 46	20: 45	20: 48	11 26E	+89 20	Fe/Uv	11-11
49184	"	"	"	20: 51	20: 55	11 20E	"	"	11-11
49185	HD 182917	19 21.9	+50 02	21 03	22 08	2 57E	+50 15	Fe/ - Ne/ -	7-7-7 7-7-7
						D4	D3 D2		
49185T	Spot Calib for	49183-84, 86-88			15 min @15V	3900	9800 98	10	
49186	HD 172360	18 34.8	+39 35	22 13	00 21	0 02E	+39 46	Fe/Uv	8-8-
49187	HD 207059	21 41.5	+22 29	00 27	01 32	1 54E	+22 58	"	8-8-
49188	HD 186776	19 41.4	+40 29	01 38	03 42	2 16W	+40 52	"	8-8-

Spectr. Temp. 72°f ..... Dome Temp./Hum 65°f / 62% Transparency Conditions . Fine 232

Focus 504 .....

Spectr. Temp. 64°f ..... Dome Temp./Hum. 62°f / 82%

Comparison Type Filter Exp	Exp. Mar.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/Ne 1	Not functioning	1"	~2	F	RC	1200/50.7	BS	IIaO-E	A	KK Abn Sp		Fine
1		4	"	"	"	"	"	"	A	KK Abn Sp		Fine
Fe/Ne 7-7		1-2"	8.4	M3	"	1200/40.5	"	098-02 E	A	Obs Prgm	std on plate 49182 (developed together)	Exp OK Severe flexure
								IIaO-E				
Fe/Ne 1		1"	7.69	M4 5II	RC	1200/50.7	BS	IIaO-E	A	Archive		Fine
		1"	6.70	KOJBHSO5	"	"	"	"	A	Archive	SET 505 T=67°F	11
		1-2"	7.98	M3III	"	"	"	"	A	Archive		s/wk

233 Wed-Thurs

Date July 3/4 1985 Observers Lgt - Tn

Emulsion Batches: IIIa-J-E -25065
(Last Last 4x5) IIIa-E ... 06114 ... 27065
∴ no Spot-Sensitivity IIIa-Os

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
49189	HD 137909	15h 23.7	+29° 27'	22:16	22:46	1h 51 W		Fe/wR6	15-3
49190	HD 158633	17h 25.3	+67° 24	22:58	00:20	1h 27 W	67° 27'	"	77-
49190T	Spot Calc for	49189, 93, 95, 96			15min@D4	1750 1500 3900 4300	1500 4200		
49191	HD 8890	1h 22.6	+18° 46	00:31	00:34	1h 24 E	39° 19'		11-1
49192	"	"	"	00:40	00:43	1h 20 E	"	"	11-11
49193	HD 159561	17h 30.3	+12° 38'	00:54	01:01	2h 00 W	—	"	22-2
49194	HD 165908	18h 03.2	+30° 33'	01:06	01:32	1h 58 W	+30 40	"	11-1
49195	HD 182640	19h 20.5	+2° 55	01:38	02:21	1h 28 W	+3° 14'	"	15-5
49196	HD 209790	22h 00.9	+64° 08'	02:27	03:38	0h 07 W	+64 38	"	15-61
49197	HD 204867	21 263	−6 01	03:44	03:50	0h 51 W	−530	"	1141
49197T	Focus test					"	"	"	20-2

Spectr. Temp. 73°F ..... Dome Temp./Hum. 68°F/70% Transparency Conditions .... very good 234

Focus ... 505 .....

Spectr. Temp. 68°F ..... Dome Temp./Hum. 63°F/85%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	1"	3.93	Fop	BC	1200/50.7	BS	IIIaJ-E	A	0.5m - Sp/KK		s/str
	1"	7.09	3C1 G9V	"	830/40.2	"	IIaO-E	A	0.5m - spl/sk	set 505 T-72°	fine
							IIIa-J-E				
	2	~2	F	"	1200/50.7	BS	IIaO-E	A	0.5m - Sp/sk		fine
	"	"	"	"	"		"	A	"		"
	"	2.2	A5m	"	1200/50.7	"	IIIaJ-E	A	"		s/str
	"	5.5	F7V	"	"	"	IIaO-E	A	"	V sl wk	
	"	3.68	F0IV	"	"	"	IIIaJ-E	"	"		str
	"	4.63	A3m	"	"	"	IIIaJ-E	"	"	Brt one of pair	s/str
		3.7	G0Ib	"	"	"	IIaO-E	"	"		fuzz
				"	"	"	DaO-E	"		set 505 V sl	red

235 Thurs. - Fri.

Date Fri. 4/5 1985 Observers Lgt - Tn

IIaD 467 mm @ 6EX Emulsion Batches: IIaO-E 0614 -25065

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49198	HD 122742	13h 58.6	+11° 16	20:45	22:14	2 45 W	+10° 56'	Fe/WR6	8-8-8
49198T	Spot Calib for 49198-99				15 min @ 15V	D4 3710	D3 4300	D2 4810	

Spectr. Temp. 76°F Dome Temp./Hum. 73°F/60% Transparency Conditions Some haze – cloudy

Focus 503

Spectr. Temp. Dome Temp./Hum. /

Comparison Type Filter Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/Ni 03, 2-3	3129	1.2"	6.8	G8V	BC	1200/50.7	BS	IIa O-E	A	asm-sp/KK	clouds at 2490 clouded out	wk
02 480								IIa O-E				

237

Sat-Sun

Date July 6-7/85 Observers BT-TM

Emulsion Batches: IIa0-E 0614 - 25065

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49199	HD216386	22 47.4	-8 07	00 35	01 39	2 29E	-7 33	Fe/W.6	11-11

Spectr. Te
Focus
Spectr. Te

Exp Mtr.
5075

Spectr. Temp. 68°F ..... Dome Temp./Hum. ~~62°F~~ / 96% Transparency Conditions Some clouds 21° 238

Focus 504

Spectr. Temp. 6.8°C ..... Dome Temp./Hum. ~~60°~~ / 99%

Comparison Type/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/Ue 11-M	6025	3-4	M2.5 III a 5.38	Fe-1	BC	1200/ 30.7	BS	IIaO E	A	Archive	clouds and	5/ unk

239

Tau Wal

Date 9/10/85 Observers T.n

5m 30s Emulsion Batches: IIIa-E -25065

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49200	HD137909	15 23·7	+29 27	21 05	21 28	0 55W	+29 16	Fe/wt 6	21-21
49200T	Spot calib for	49200-02		15 min @ D4	17.5V 3900	15V 4300	15V 4810		
49201	HD138749	15 28·9	+31 42	21 32	22 01	1 23 W	+31 31	Fe/wt 6	15-15
49202	HD164852	17 58·1	+20 50	22 06	22 55	0 12E	+20 26	"	15-15

Spectr. Temp. 77°F Dome Temp./Hum. 70°/83% Transparency Conditions sl hazy - cloudy 240

Focus 503

Spectr. Temp. ..... Dome Temp./Hum. 65°/90%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
30 300	1-2"	3.93	FOp	BC	1200/507	BS	IIIaJ-E	A	Asm sp kt		fine
							IIIaJ-E				
44, 900	1-2"	4.10	B7nn	BC	1200/507	BS	"	"	Be-kt		sl/str
13,555	2"	5.19	B3IV	"	"	"	"	A	SB-Be	cloud	slwk
										high fog	

241 Wed-Thurs

Date July 10-11/85 Observers KK / Lst., Pi...

3¾ 71°

4½ 71°

Emulsion Batches:
IIIaF 098 15103-28065
IIaD 06114-09075
IIaG 29114-10075 22HR

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49203	HD 124897	14 4.1	+19 42	19 21	19 22			sky	
49204	sky			19 28	19 32?				
49205	sky			19 38	19 40				
49206	HD 127762	14 28.0	+38 45	19 50	19 55				
49208	HD 8890	1h 22.6	+28° 46'	20:47	20:49	10h 44 E	89° 17'	F/W12	11-11
49209	"	"	"	20:50	20:54	10h 38 E	"	"	11-11
49210	HD 137909	15h 23.7m	+29° 27	21:03	21:24	0h 56 W	+29° 18'	"	15-15-15
49211	HD 140538	15h 39.1	+2° 50'	21:34	22:39	1h 55 W	+2° 42'	"	8-8-8
49212	HD 159561	17h 30.3	+12° 38'	22:46	22:54	0h 18 W	+12° 40'	"	15-15-15
49213	HD 165908	18° 03.2	+30° 33'	23:00	00:45	1h 38 W	+30° 43'	"	8-8-8
49213T	SPOT CAL FOR PLATES 49210, 12, 14.				15 MIN @ D4	@ 17.5V 3900	@ 15V 4300	@ 15V 4310	
49214	HD 182640	19h 20.5	+2° 55'	00:51	01:15	0h 49 W	+3° 14'	"	15-15-15
49215	HD 186791	19h 41.5	+10° 22'	01:21	01:29	0h 42 W		"	8-
49215F	FOCUS TEST	(25,25)						F/W12	25-25

Spectr. Temp. 72° ..... Dome Temp./Hum. 64°F/53% Transparency Conditions ... fair ... and 242

Focus 505 ..... by end - intermittent (mostly) cloud

Spectr. Temp. ..... Dome Temp./Hum. 58°F/60% "

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
clear 250000	2"	V=0	K2 III p	BC	1200/40.5	RS	IIIaF	A	TesT	majority of counts from a Bv	
clear 300000	N/A	N/A	G2V	"	"	"	"	"	"		
clear 150000	"	"	"	"	"	"	"	"	"		
clear 102000	"	3.03	A7 III	"	"	"	098-02	"	"		
6126	2-3"	2	F	"	1200/50.7	35	IIaO-E	"	as [illegible]/AK	no plate number 49207	fine
6668	"	2	F	"	"	"	"	"	"		
30012	"	3.93	F0 p	"	"	"	IIIaJ-E	"	"		fine
7028	"	6.55	dG5	"	"	"	IIaO-E	"	"	problems during - bkg - cloud at 5300 - cloud at 5600	
26038	"	2.2	A5 III	"	"	"	IIIaJ-E	"	"		fine
7001	"	5.5	F7V	"	"	"	IIaO-E	"	"	- clouds at 1200 - much identified cloud	fine
							IIIaF-ef				V
30246	"	3.68	F0 IV	"	"	"	IIIaJ-ef	"	"		fine
486	"	4.1	K3 II	"	"	"	IIaO-E	"	STDVEL	CLOUD!	wk
		"		"	"	"	IIaO-E	"		T=64°F F=505	good

243 Thurs.-Fri. 7" 68°

Date July 11/12 85 Observers Lgt - Ri / KK - piggyback

Emulsion Batches:
II aO-E 06114-09075
III aO-E 29114-10075

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp	Exp Mtr
49216 F	Focus Test					0.00		Fe/WRC	25-2	
49216	HD 8890	1h 22.6	+88° 46'	20:37	20:38	10h 52 W	89° 18'	"	12-17	6087
49217	"	"	"	20:40.5	20:41.5		"	"	12-16	6007
49218	HD 137909	15h 23.7	+29° 27'	20:47	21:08	0h 44 W	29° 15'	"	15-15-	3004
49219	HD 158633	17h 25.3	+67° 24'	21:15	22:10	0h 13 E	+67° 25'	"	7-7-	4530
49220	HD 201156 A	21h 02.7	+33° 44'	22:27	00:25	1h 39 E	+34° 10	"	3-3-	2033
49220T	SPOT CAL FOR PLATES 49216, 17, 19 -					15 MIN @ 15 VOLTS		① D4 3900 ② D3 4200 ③ D2 4810		
49221	HD 201156 B	21h 02.7	+33° 44'	00:28	01:02	1h 00 E	+34° 10	"	36	187
49221F	Focus TEST								25-2	

Spectr. Temp. 75°F Dome Temp./Hum. 67°F / 60% Transparency Conditions fairly good 244

Focus 503

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
							IIaO-E	A			ok
6289	3"	2	F	BC	1200/50.7	BS	"	"	asm-sp/KK		fine
6007	"	"	"	"	"	"	"	"	"		fine
30011	"	3.93	Fop	"	"	"	IIIaJ-E	"	"		fine
4520	"	7.09	1kt or 69V	"	830/40.2	"	IIaO-E	"	"	T=73°F F=505	fine comp & vacuum
2023	"	7.3	A2	"	830/40.2	150/.3	IIaO-E	A	ASM-SP/HK		fine comp uneven
							IIaO-E				✓
187	"	8.1	A2	"	"	"	IIaO-E	A	ASM-SP/KK	T=67°F F=507	v. weak
						150/.7				CLOUDED IN T=67°F F=507	sl. blue

245 Fri-Sat Variable Star Contd tour looked at 8 Vir & M13

Date July 12-13/85. Observers K.St-R.

7m 68° Emulsion Batches: IIaO-E.06114-09075.
4m 68° 098-02E.15103-28065

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49222	HD150450	16 36.0	+49 07	21 55	22 53	1° 21' W	+49 05	Fe/W	8-88
								① D4 ② D3 ③ D2	
49223	SPOT CAL FOR PLATES 49222, 25				15 MIN @ 15 VOLTS			3900 4300 4910	
49223	HD145753	16 25.4	+42 06	23 00	23 06	1° 49' W	+42 00	Fe/-	T 7-7
								Ne/-	7-7
49224	HD152917	19 21.9	+50 02	23 12	00 15	0 01E	+50 21	Fe/-	7-7.7
								Ne/-	7-7
49224	SPOT CALN FOR PLATES 49223, 24			15 MIN	① D3 1/2 V 4810	② D1 7 Hz	③ D2 7 5450		
49225	HD152917	19 21.9	+50 02	00 20	04:02	3 45W	+50 21	Fe/W	8-8-

Spectr. Temp. 69°F ..... Dome Temp./Hum. 8°C / 91% Transparency Conditions high cloud, low haze

Focus 504 .....

Spectr. Temp. 64°F ..... Dome Temp./Hum. 16°C / 97%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
B" FILTER											
8003		6.4	M2.5IIIab	BC	1200 / 50.7	BS	IIaO-E	A	Archive BS		fine
							IIaO-E				"
ND FILTER											
40016	2-3"	6.56	M6III	BC	1200 / 40.5	BS	098-02E	A	Obs Pgm	T=68°F F=506	fine *
"		V 8.4	M6	"	"	"	"	A	Obs Pgm		good *
							098-02E				"
B" FILTER											
2500		V 8.4	M6	BC	1200 / 50.7	BS	IIaO-E	A	Obs Pgm	T=67°F F=505	wk

* high age fog

247 Mon-Tues Peel Region Summer School tour looked at M13 9" 68°

Emulsion Batches: IIaO-E.06114-09075 098-02E15103-28065

Date July 15-16/85 Observers L.H.-R.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49226	HD148783	16 25.4	+42 06	21 51	22 11	1 01W	+42 03	Fe/L	8-8-8
49227	HD152917	19 21.9	+50 02	22 19	23 33	0 34E	+50 19	Fe/-	7-7-7
								Ne/-	7-7-7
49227T	SPOT CAL FOR PLATES 49227-				15MIN 4810	① D3 15VOLTS ② D1 7VOLTS	Hd	③ D2 7VOLTS 3/5D	
49228	HD152917	19 21.9	+50 02	23 41	04:04	3 59 W	+50 19	Fe/L	8-8-8
49228T	SPOT CAL FOR PLATES 49226,28				15MIN@15VOLTS	① D4 3900	② D3 4300	③ D2 4810	

Spectr. Temp. 74°F ..... Dome Temp./Hum. 21°C./85% Transparency Conditions . good .....

Focus .... 503 .....

Spectr. Temp. ..... Dome Temp./Hum. 16°C./80%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
B FILTER											
5035		6.56	M6III	BC	1200/50.7	BS	IIaO-E	A	Obs Pgm		good
No Filter		V									
50005		8.4	M6	BC	1200/405	BS	098-02E	A	Obs Pgm	T=73°F F=505	good
							098-02E				V
V Filter		V									
2800	3"	8.4	M6	BC	1200/50.7	BS	IIaO-E	A	Obs Pgm	T=72°F F=504	weak
							~~IIaO-E~~				V

249 Tues/Wed

Date 1985 July 16/17 Observers BW PI

Emulsion Batches:
5"-68 IIIa-J 29114 - 10075
7"-68° IIa0-E 29114 - 12075

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49229	HD138749	15h 23m.9	+31° 42'	20:32	20:55	00:45W	+31° 30'	Fe/WR6	1-7.5-15
49229F	FOCUS 9 EST								25-25
49230	HD138749	15h 23m.9	+31° 42'	20:59	21:32	01:21W	+31° 30'	Fe/WR6	7-7-7
49230T	SPOT CAIN FOR PLATES 49229-31				15 MIN @ D4	① 17.5V 3900	② 15V 4300	③ 15V 4810	
49231	HD 164732	17h 58m.1	+20° 50'	21:37	22:43	00:03W	+20° 57'	Fe/WR6	15-15-15
49232	HD 191587	20h 05m.5	+35° 11'	22:50	00:52	00:06W	+35° 34'	Fe/WR6	7-7-7
49232T	SPOT CAIN FOR PLATES 49232-35				15 MIN @ 15 VOLTS	① D4 3900	② D3 4300	③ D2 4810	
49233	HD 217312	22h 58m.8	+62° 32'	01:00	02:41	00:55E	+63° 06'	Fe/WR6	7-7-7
49234	HD 220057	23h 15m.7	+60° 57'	02:46	03:28	00:29E	+61° 09'	Fe/WR6	7-7-7
49235	HD 217811	22h 58m.2	+43° 31'	03:33	04:00	00:20W	+44° 05'	Fe/WR6	7-7-7
49235F	FOCUS 9 EST							Fe/WR6	25-25

Spectr. Temp. 71°F ..... Dome Temp./Hum. 78°C / 54% Transparency Conditions ..... Excellent 250

Focus .....

Spectr. Temp. 63°F ..... Dome Temp./Hum. 14°C / 96%

Comparison Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	(000)	2-3	4.10	I37un	BC	1200/50.7	BS	IIa-JEF	A	Be-Blu		ok
							BS	IIa-O	A		T=71°F	↓
	350 22	3	4.10	I37un	BC	1200/50.7	150/.7	IIa-JEF	A	Be-Blu		fine
								IIa-7et				↓
	35000	3-4	5.19	I33II	BC	1200/50.7	BS	IIa-JEF	A	S13-Blu	T=70°F	fine
	5000		7.26	I30.5II	BC	830/40.2	BS	IIa-OE	A	runaway	T=68°F F=507	slwk
								IIa0-E				↓
	5000		7.2	I30II	BC	830/40.2	BS	IIa-OE	A	S13-Blu/Ly		slwk
	50	3	6.94	I32II	BC	830/40.2	BS	IIa-OE	A	Blu/Ly		slwk
	50a		6.39	I30II	BC	830/40.2	BS	IIa-OE	A	S13-Blu	T=63°F F=503	fine
						830/40.2	BS	IIa0	A		T=67°F F=503	vsl blue

'251 Wed/Thurs

Date 1985 Sep 17/18 Observers Lgt - Tn (KK - fol AM)

Emulsion Batches:
7" 65 IIaO - 06114 - 12075
5" 68 IIaJ-Eg 29114 - 10075

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49236	HD 8890	1h 22.6	+88° 46'	22:04	22:06	9h 03 E	89° 16'	Fe/w6	11-11
49237	"	"	"	22:10	22:13	8h 57 E	"	"	11-11
49238	HD 144287	16h 0m.0	+25° 30'	22:29	00:08	3h 31 W	+25° 24'	"	7-7-7
49238T	Spot Calc for	49236	-41,44,46		15min e 15V	D4 3900	D3 4300	D3 4810	
49239	HD 8890	1h 22.6	+88° 46'	00:20	00:23	6h 47 E	+89° 17'	Fe/w6	11-11
49240	"	"	"	00:26	00:27	6h 43 E	"	"	11-11
49241	HD 165908	18h 03.2	+30° 33'	00:37	00:52	2h 11 W	+30° 40'	"	11-11
49242	HD 159561	17h 30.3	+12° 38'	00:58	01:03	2h 54 W	+12° 40'	"	21-21
49243	HD 182640	19h 20.5	+2° 55	01:07	01:22	1h 23 W	+3° 13'	"	21-21
49244	HD 66751	7h 59.9	+70° 00'	01:35	03:10	9h 33 E	+69° 53'	"	8-8-8
49244T	Spot Calc for	49242,43 + 49218+ 49245			15min e D4	17.5V 3900	15V 4300	15V 4810	
49245	HD 209790 (A)	22h 00.9	+64° 08'	03:16	03:44	1h 08 W	+64° 37'	"	21-21
49246	HD 222368	23h 34.8	+5° 05'	03:51	03:59	0h 13 E	+5° 38'	"	11-11
49247	sky					0			
49248	sky					0			

Spectr. Temp. 73° F Dome Temp./Hum. 69°F/54% Transparency Conditions (typical) haze, thin clouds at 252

Focus 504 ≈ 1:30 EST

Spectr. Temp. 68°F Dome Temp./Hum. 65°F/54%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
6689	2"	2	F	BC	830*/50.7	BS	IIaO-E	A	0+-5p / KK	Percy tour coeve * G12 was in !!	blank
6597	"	"	"	"	"	"	"	"	"		blank
4523	"	7.62	G8V	"	830/40.2	"	"	"	"	F= 506 T=73F	
							"				V
6308	"	2	F	BC	1200/50.7			A	"	F=504 T: 70F	Exp fine, deferm e-obtain
6312	"	"	"	"	"	"	"	"	"		Exp fine
6447	"	5.5	F7V	"	"	"	"	"	"		v sl wk
29874	"	2.2	A5 III	"	"	"	IIIaJ-E	"	"		v sl str.
30008	1½"	3.68	F0 IV	"	"	"	"	"	"		fine
6013	2½"	V=6.48	dF8	"	"	"	IIaO-E	"	"		sl weak
							IIIaJ				e
34932	1"	4.63	A3m	"	"	"	IIIaJ-E	"	"		fine
6431	"	4.6	F7V	"	"	"	IIaO-E	"	STD VEL		fine
			G2V	BC	1200/40.5	RS	098	A	TOST		
40000			"	"	"	4	"	4	"		
yellow filter											

253 Thurs/Fri.

Date 85 July 18/19 Observers Lgt-Tn

17160 5h 68° 7h 68°

Emulsion Batches: IIIa-J+f.g. 29114 – 10075
IIaO-E – 18075

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49249	HD 159561	17h 30.3	+12° 38'	00:10	00:16	2h 11 W	+12° 42'	Fe/WR6	21-21
49250	HD 182640	19h 20.5	+2° 55'	00:24	00:41	0h 47 W	+3° 11'	"	21-21
49250T	Spot Calc for 49249-51				15min @ D4	17.5V 3900	15V 4300	15V 4810	
49251	HD 196524	20h 32.9	+14° 15'	00:46	01:09	0h 02 W	+14° 38'	Fe/WR6	21-21
49252	HD 165908	18h 03.2	+30° 33'	01:16	01:33	2h 57 W	+30° 42'	"	11-11
49253	HD 8890	1h 22.6	+88° 46'	01:43	01:45	5h 19 E	+89° 17'	"	11-11
49254	HD 158633	17h 25.3	+67° 24'	02:01	03:31	5h 36 W	+67° 13'	"	7-9-7
✓49254T	Spot Calc for 49252-54			55-58	15min @ 15V	D4 3900	D3 4300	D3 4810	

Spectr. Temp. 72°F ..... Dome Temp./Hum. 66°F/92% ..... Transparency Conditions ..... occasional cloud near Sun, 25+ mostly clear

Focus 504 .....

Spectr. Temp. 69°F ..... Dome Temp./Hum. 65°F/94% .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
25045	2-3"	2.2	A5 V	EC	1200/50.7	BS	IIaJ-E	A	asm sp/ICK		Fast wk fine
29887	2-3'	3.68	F0 IV	"	"	"	"	"	"		Fast wk fine
							"				
27531	"	V= 3.78	F5 IV	"	"	"	"	"	"	bit of cloud during exposure	Fast wk fine
6460	"	5.5	F7 V	"	"	"	IIaO-E	"	"		fine
6420	"	2	F	"	"	"	"	"	"		vsl str
5060	"	709	dK1 or G9 V	"	830/40.2	"	"	"	"	Reversal T=70° F=506	fine
							"			↳ cloud at end ½ int	

255 Sat-Sun 2 Large Tours Observed. 7m 68°

Date July 20-21/88. Observers BH-Tn

Emulsion Batches:
IIa-O-E .... -18075

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49255	HD 182917	19 21.9	+50 02	23 05	01 18	W	+50 18	Fe/Ov6	8-8

Spectr. Te
Focus ...
Spectr. T
Exp. Mtr
880

Spectr. Temp. 73°F Dome Temp./Hum. 67°F / 62% Transparency Conditions cirrus cloud 256

Focus 503

Spectr. Temp. Dome Temp./Hum. 66° / 80%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
880	2"	V 8.4	MB	BC	1200 / 30.7	35	IIaO-E	A	Obs Pgm	broken - 1px seen	vocals
									5 placed in previous nights		
									IIaO Exp bar.		

257 Sun-Mon

Date July 21-22/85 Observers BT-TH

7m 68° Emulsion Batches: IIa-E -18075

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49256	HD140160	15 37.1	+13 10	20 52	21 21	1 22 W	+12 58	Fe/W6	11-11
49257	HD153806	16 56.5	+31 04	21 24	21 36	0 17 W	+31 05	"	11-11
49258	HD205435	21 30.2	+45 09	21 40	22 05	3 45 E	+45 39	"	11-

Spectr. Temp. 74°F Dome Temp./Hum. +72°/82% Transparency Conditions hazy 258

Focus 504

Spectr. Temp. 73°F Dome Temp./Hum. +70°/93%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
8015	1-2"	5.38	A0, Sr	BC	1200/507	BS	IIaO E	A	Archive-BS		good
8137	2"	3.91	A0 II	"	"	"	"	A	Archive-BS		fine
8008	3-4"	4.91	G8 III CN-.5	481 "	"	"	"	A	Archive		fine

259

Mon-Tues

Date July 22-23/85 Observers B.T.-T.

Backed 8h 68° Emulsion Batches: IIaO.E. 06114 - 18075

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49259F	Focus test					0 0	+7 35	Fe/W6	50-50
49259	HD 161096	17 38.5	+4 37	20 27	20 34	1 23 E	+4 42	Fe/W6	
49260	HD 130705	14 44.6	+10 28	20 40			+10 15	"	8
49260	HD 138652	15 29.5	+64 33	20 55	22 40	2 53 W	+64 21	Fe/W6	8-8-
49261	HD 168270	18 13.7	+18 06	22 45	22 55	1 24 W	+18 12	"	8-8-8
49261T	Spot Calib	for 49	259-64		15 min	@15V D4 3900	D3 4300	D3 48.0	
49262	HD 175824	18 52.1	+48 44	23 59	01 06	1 58 W	+48 56	Fe/W6	8-8-8
49263	HD 216228	22 46.1	+65 40	01 11	01 28	2 25 E	+66 13	"	11-1
49264	HD 216946	22 52.0	+49 12	01 32	03 35	0 26 W	+49 46	"	8-8-8

Spectr. Temp. 69°f Dome Temp./Hum. 64°/69% Transparency Conditions Fine - some cloud 260

Focus 5.04

Spectr. Temp. 60°f Dome Temp./Hum. 52°/98%

Comparison Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
					BC	1200/50.7	BS	IIIaJ	A			ok
Fe/Ne	5416	3"	3.9 V	K2III	BC	1200/507	BS	IIaO-E	A	Std Vel		fine
"			6.7	K3IIIb	"	"	"	"	A	Archive	too faint for sky cont	
Fe/Ne	6956	3"	6.75	KoIII	BC	1200/50.7	BS	IIaO-E	A	Archive BS	* at Limit T=67°f Set 505	fine
"	8049	3-4"	6.02	B9V	"	"	"	"	A	"	T: 65°f Set 505	slwk
								"				
Fe/Ne	8071	3-4"	6.2	F3II	BC	1200/50.7	BS	IIaO-E	A	Archive	T 63°f Set 506	slwk
"	8091	"	4.57	KoIII	"	"	"	"	A	Archive		fine
"	8042	2"-5"	6.73	K5Ib	"	"	"	"	A	Archive		fine

261

Date 1985 July 23/24 THU/WED Observers Bln-Tn

Emulsion Batches:
7¾" 69° IIaO-E 06114 -21075
5" 68° IIIaJ-E 5g 17075

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp.
49265	HD 138749	15h 28m.9	+31° 42'	20:20	20:50	01:06 W	+31 33		
49266	HD157482	17h 18m.5	+40° 04'	20:54	21 48	00 15 W	+40 05		
49267	HD164852	17h 58m.1	+20° 50'	21:51	22:43	00:43 W	+20 56		
49267T	Spot Calib for 49265, 66, 69-71, 81. 15 min @ D4					17.5V 3400	15V 4300	15V 9810	
49268	HD191567	20h 05m.5	+35° 11'	22:54	01:47	01:28 W	+35 34		
49268T	Spot Calib for 49266, 68, 75-80				15 min @ 5V	D4 3400	D3 4300	D3 9810	
49269	HD19356	03h 01m.7	+40° 34'	01:56	02:13	05:05 E	+41° 01		
49270	HD19356	03h 01m.7	+40° 34'	02:17	02:26	04.52 E	+41° 01		
49271	HD19356	03h 01m.7	+40° 34'	02:29	02:35	04:43E	+41° 01'		
49272	HD19356	03h 01m.7	+40° 34'	02:33	02:43	04'36 E	+41° 01'		
49273	HD19356	03h 01m.7	+40° 34'	02:45	02:48	04:30 E	+41° 01'		
49274	HD19356	03h 01m.7	+40° 34'	02:51	02:53	04:25 E	+41° 01		
49275	HD19356	03h 01m.7	+40° 34'	02:56	03:00	04:17 E	+41° 01		
49276	HD19356	03h 01m.7	+40° 34'	03:03	03:05	04:12 E	+41° 01'		
49277	HD19356	03h 01m.7	+40° 34'	03:09	03:10	04:07 E	+41° 01'		
49278	HD19356	03h 01m.7	+40° 34'	03:13	03:15	04:03	+41° 01		

Spectr. Temp. 69°F ..... Dome Temp./Hum. 66°F / 62% .. Transparency Conditions sl. hazy 262

Focus 535 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... / .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
5049	1-2	9.10	B7nm	BC	1200/50.7	BS	IIIa-JEfg	A	Be-Blu	T=69°F F=535	fine
6050	1"	6.22	dF8 6+9	BC	1200/50.7	BS	IIa-0E	A	SB-Blu/Ly		fair
0178	2"	5.19	B3IV	BC	1200/50.7	BS	IIIa-JEfg	A	SB-Blu	Horrible slight stellar exposure over-exp in emp.	Fe sl wk fine dif
							IIIa-JEfg				✓
10149	1-3"	7.26	B0-IV	BC	1200/50.7	BS	IIa-0E	A	Runaway *		sl wk
							IIa-0E				✓
	2	2.2	B3I	BC	1200/50.7	BS	IIIaJ-Efg	A	BE-Blu	T=63°F F=530	v str
7529	2	2.2	B3V	BC	1200/50.7	BS	IIIa-JEfg	A	BE-Blu		str
5059	2	3.2	B3V	BC	1200/50.7	BS	IIIa-JEfg	A	BE-Blu	sl	str
3308	2	2.2	B3III	BC	1200/50.7	BS	IIIa-JEfg	A	BE-Blu		fair
2315	2	2.2	B3V	BC	1200/50.7	BS	IIIa-JEfg	A	BE-Blu	v sl	v sl wk
		2.2	B3III	BC	1200/50.7	BS	IIIa-JEfg	A	BE-Blu		sl wk
3030		2.2	B3V	BC	1200/50.7	BS	IIIa-0E	A	BE-Blu		sl str
3211		2.2	B3V	BC	1200/50.7	BS	IIIa-0E	A	BE-Blu	v	v str
1179		2.2	B3V	BC	1200/50.7	BS	IIIa-0E	A	BE-Blu		fair
3132		2.2	B3V	BC	1200/50.7	BS	IIIa-0E	A	BE-Blu	v sl	v sl wk

203 MGE #2

Emulsion Batches:

Date 1985 July 23/24 TUE/WED Observers CONTINUED

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49279	HD19356	03h01m.7	+40°34'	03:17	03:19	03:59E	+41°01'	Fe/UV6	11-1
49280	HD 19356	03h01m.7	+40° 34'	03:21	03:22	03:56E	+41° 01'	Fe/UV6	11-11
49281	HD 11241	01h45m.5	+54°39'	03:27	04:23	01:37 E	+55°13'	Fe/UV6	21-2

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions ..... 264 ...

Focus ... 506 .....

Spectr. Temp. 63°F ..... Dome Temp./Hum. ~~56?~~ / 96%

Comparison Type/Filter	Comparison Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
		3" ref 2176		22	B8I	BC	1200/50.7	BS	IIa-0E	A	EB-B/h		s/wk
		UFTer 4048		2.2	B8I	BC	1200/50.7	BS	IIa-0E	A	EB-B/h		wk
		RFTer 5022	3"	5.34	B8I	BC	1200/50.7	BS	IIa-JEsg	A	EB-B/h		v s/wk
						KK	Now there are 6 IIaJ strips in dewar + 3 (4×5's) Ok on IIaO though						

265

Fri-Sat

Date Jul 26-27/85 Observers BT-TH

Emulsion Batches:
IIa.0-E ...0614 ...-21075
.....
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
49282	HD166045	18 03.8	+26 05	20 23	21 33	0 33E	+26 15	Fe/W.6	11-11
49283	HD206936	21 40.4	+58 19	21 38	22 55	1 47E	+58 50	"	8-8-8
49283T	Spot Calc for	49282-86.		15min @15V		D4 3980	D3 4300	D3 4810	
49284	HD201616	21 05.7	+9 35	23 00	00 19	0 49E	+10 06	Fe/W.6	8-8-
49285	HD223173	23 42.1	+56 54	00 28	03 40	0 04E	+57 28	"	8-8-8
49286	HD222368	23 34.8	+5 05	03 44	04 00	0 22W	+5 41	"	11-11

Spectr. Temp. ..+.72°F..... Dome Temp./Hum 69°F/62% Transparency Conditions Sl. hazy 264

Focus .....5.04.....

Spectr. Temp. 67°F..... Dome Temp./Hum 62°F/62%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
B filter											
2046	3"	5.98	A3V	BC	1200/507	BS	IIaO-E	A	Archive-BS		v slwk
0017	2"-4"	6.43	M2Iae	"	"	"	"	A	Archive		fine
							"				
2054	2"	6.09	A2Vs	BC	1200/507	BS	IIaO-E	A	Archive-BS		fine
0011	2"-4"	7.16	K3IIb	"	"	"	"	A	Archive		fine
0362		4.6	F7V	"	"	"	"	A	Std Vel		fine

267 Sat-Sun

Date July 27-28/35 Observers BT-TH

Emulsion Batches: IIaO-E 06114 - 24075

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49287	HD 212466	22 19.4	+55 28	23 01	04 20	2 03W	+56 00	Fe/Uv6	8-8-8
49287T	Spot Calc for 4928[illegible]		Tg 49290-92		15min@15V	04 3900	03 4300	02 4310	

Spectr. Temp. 67°F ..... Dome Temp./Hum. 60°F/53% Transparency Conditions Fine 268

Focus 504

Spectr. Temp. 63°F ..... Dome Temp./Hum. 57°F/54%

Exp. Mtr. B filter	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
* 3195	2-4	8.63	KOOTa	BC	1200/507	BS	IIaO E	A	Archive	Extinct	wk but good
							IIaO-E				✓
*Note - I would have thought this should go faster than this. Conditions were OK enough.											
		Exp meter balance behavior was OK though, TH									

-24075

269 Sun-Mon

Date July 28-29/85 Observers BT-TM

Emulsion Batches:
IIaO-E 06114 - 24075
098 D.E - 20075

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49288F1	Focus test					0 0	+42 -	Fe/D6	25-25
49288F2	Focus Test					0 0	"	Fe/-	25-5
								Ne/-	25-25
49288	HD148783	16 25.4	+42 06	20 25	20 33	0 13W	+42 02	Fe/-	7-7
								Ne/-	7-7
49289	HD182917	19 21.9	+50 02	20 38	21 37	1 37 E	+50 18	Fe/-	7-7
								Ne/-	7-7
49289T	Spot calc for	49288-	89,		15 mg @ 4/10	1 03 7VIII Hd	7VII +50		
49290	HD207978	21 48.0	+28 20	21 44	22 47	2 55E	+28 49	Fe/D16	8-8-8
49291	HD203206	21 15.7	+21 36	22 51	00 10	0 59E	+22 04	"	8 8 8
49292	HD8890:	1 22.6	+88 46	00 18	00 35	5 53E	+89 17	"	11-11

Spectr. Temp. 73.5°F Dome Temp./Hum 72°F/16% Transparency Conditions fine - s/cloudy 270

Focus 504

Spectr. Temp. 73° Dome Temp./Hum 68°F/73%

Comparison Type/Filter	Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/ Wg6	25-2	BLUE FILTER				BC	1200/50.7	BS	IIaO-E	A		Note - Tilt change made by making final setting with Tilt increasing (ie down to 30° then to 40.5°)	coarse slewk
Fe/ Ne/	25-2	NO FILTER & blank in				BC	1200/40.5	BS	098-02E	A			coarse vslewk
Fe/ Ne/	7-7	NO FILTER & Blank in 50690	~1"	656	M6III	BC	1200/40.5	BS	098 02E	A	Obs Pgm		fine
Fe/ Ne/	7-7	NO FILTER & Blank in 50316	1-2"	V 84	M6	"	"	"	"	A	"		fine
									098 02E				
Fe/ Wg6	8-8	BLUE FILTER 2071	2"	5.95	F6IV	BC	1200/50.7	BS	IIaO-E	A	Archive-BS	Final setting of tilt change with tilt increasing	vslewk
"	8-8	2465	2"	621	B6IV	"	"	"	"	A	Archive-BS	cloud 73°F	vslewk
	1-1	BLUE FILTER 0022	2-3"	2	F	"	"	"	"	A	KK Asm Sp	cloud	fine

271

Wed - Thurs

Date July 31 : August 1/85 Observers BI - RI

Emulsion Batches:

8m 68° IIaO-E 06114-21075

4m 68° 098-02 15013-20075

IIaO-E 06114-24075

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49293	HD5890	1 22.6	+88 46	21 20	21 22	8 51E	+89 18	Fe/ Wr6	11-11
49294	"	"	"	21 27	21 29	8 44E	"	"	11-11
49295	HD182917	19 21.9	+50 02	21 41	22 55	0 0TE	+50 20	Fe/-	7-7
								Ne/-	7-7
						① D4	② D3	③ D2	
49295T1	SPOT CAL FOR PLATES 49293-94,96,			15MIN@15VOLTS		3900	4300	4810	
						① D3 15V	② D1 7V	③ D2 70	
49295T2	SPOT CAL FOR PLATES 49295+97			15MIN		4810	Hd	5450	
49296	HD190390	19 59.6	-11 53	23 07	02 25	2 46W	-11 30	Fe/ Wr6	3-3
49297	HD207076	21 41.4	-2 40	02 40	03 36	2 14W	-2 10	Fe/-	7-7
								Ne/-	7-7
49297F	FOCUS TEST							Fe/-	25-25
								Ne/-	25-25
	1st attempt to locate P/Halley (1982i)								
49298	HD9138	1 24.9	5 35	04 09	04:33	0 34E	+6 12	Fe/ Wr6	7-14
49298F	FOCUS TEST							Fe/ Wr6	25-25

Spectr. Temp. 66°F ..... Dome Temp./Hum. 17°C/94% Transparency Conditions ... Good ..... 272.

Focus ..... 505 .....

Spectr. Temp. 61°F ..... Dome Temp./Hum. 14°C/98%.

Comparison Type Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/ Wing 11-	BLUE FILTER 10007	3"	2	F	BC	1200/50.7	BS	IIaO-E	A	KK Asm Sp		fine
" 11	BLUE FILTER 10010		"	"	"	"	"	"	A	KK Asm Sp		
Fe/- 7- Ne/- 7-	NO FILTER 50001		V 8.4	M6	BC	1200/40.5	BS	098 02E	A	Obs Prgm		sl. weak
								IIaO-E				
								098-02E				
Fe/ Wing 5-3	BLUE FILTER 6502	4	6.86	F, III	BC	1200/50.7	150μ/1.0	IIaC-E	A	Fe/rG Prgm	T=65°F F=505	sl weak
Fe/- Ne- 7-	NO FILTER 50001		7.89	M7 III	BC	1200/40.5	BS	098 02E	A	Obs Prgm	T=62°F F=506	sl. weak
Fe/- Ne- 5-					B.C.	1200/40.5	B.S.	098-02E			T=62°F F=506	
Fe/ Wing 7-	BLUE FILTER 4000		5.1	K4III	BC	1200/50.7	BS	IIaO-E*	A	Std Vel		good
Fe/ Wing 5-					B.C.	1200/50.7	B.S.	IIaO-E*	A		T=61°F F=506	

273 Thurs-Fri

Date August 1-2/55. Observers BT-RI

Emulsion Batches:
Tau-E 06114-24075
4"68° 098-02R 15013-20075

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49299F	Focus Test					0 00		Fe/W6	25-25
49299	HD8890	1 22.6	+55 46	20 21	20 23	9 46E	+89 17	Fe/W6	11-11
49300	"	"	"	20 25	20 27	9 42E	"	"	11-11
49301	HD190390	19 59.6	-11 53	20 43	01 05	1 26W	-11 32	Fe/W6	3-3-3
						① D4	② D3	③ D2	
49301TV	SPOT CALN FOR PLATES 49299-49301,04				15MIN @ 15 VOLTS	3900	4300	4810	
49302	HD182917	19 21.9	+50 02	01 16	02 28	3 30W	+50 22	Fe/-	7-7-7
					① 15V D3	② 7V D1	③ 7V D2	Ne/-	7-7
49302TV	SPOT CALN FOR PLATES 49302+303			15MIN	4810	HA	5430		
49303	HD207076	21 41.4	-2 40	02 34	03 16	1 56W	-2 10	Fe/-	7-7
								Ne/-	7-7
49303F	Focus Test							Fe/-	20-20
								Ne/-	20-20
	2nd attempt to locate comet P/Halley (1982 i)								
49304	HD222368	23 34.8	+5 05	03 58	04 10	0 57W	+5 40	Fe/W6	11-11

Spectr. Temp. 71°F ..... Dome Temp./Hum. 20°C/72% Transparency Conditions ... PHOTOMETRIC ..... 274..

Focus .. 504 .....

Spectr. Temp. ..... Dome Temp./Hum. ... 19°C/86%

Comparison Type/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/					BC	1200/ 50.7	BS	IIaO-E	A			contstired
Fe/	BLUE FILTER 2031		2	F	BC	1200/ 50.7	BS	IIaO-E	A	KK Abm Sp.		Fine
"	BLUE FILTER 1009		"	"	"	"	"	"	A	KK Abm Sp		
Fe/	BLUE FILTER 2001	3-4	6 86	F III	BC	1200/ 50.7	150u 11.0	IIaO E	A	Fe/+6 Pgm		fine
								IIaO-E				
Fe/ Ne/	NO FILTER 50002		V 8.4	M1	BC	1200/ 40.5	BS	098 02E	A	Obs Pgm	T=67°F F=505	good
								098 02E				
Fe/ Ne/ Fe/ Ne/	NO FILTER 49999		7.89	N/7 III	BC	1200/ 40.5	BS	098 02E	A	Obs Pgm		good
					B.C.	1200/ 40.5	B.S	098-02E	A		T=64°F F=505	
Fe/	BLUE FILTER 0005	3	4 6	F-V	BC	1200/ 50.7	BS	IIaO-E	A	Std Ves	T=63°F F=506	Fine

Emulsion Batches:

8m 68° Tg-J 29114 - 17075
Had-E 06114 - 01085
8m! 68° IIIa-J 29114 - 25075

Date 1985/08/2-3 FRI-SAT ..... Observers Blu-Ri .....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
49305	HD138749	15h 29m.9	+31° 42'	20.04	20:21	01 26 W	+31°33	Fe/WR6	21-2
19305F		Focus Test				00 05W		Fe/WR6	21-2
49306	HD164852	17h 58m.1	+20° 50'	20:25	21:02	00 31 E	+20°59	Fe/WR6	14-14
49306T	SPOT CAL FOR PLATES 49305-06				15 MIN @ D4	① 17.5V 3900	② 15V 4300	③ 15V 4810	
49307	HD157482	17h 18m.5	+40° 04'	21.07	22:16	01:23W	+40°06	Fe/WR6	7-7-7
49307T	SPOT CAL FOR PLATES 49307-8, 11-13, 15-17, 19-21, 23-25, 27-29				15 MIN @ 15 VOLTS	① D4 3900	② D3 4300	③ D2 4810	
49308	HD217319	22h 54m.8	+62° 32'	22:23	23:57	02:33E	+63°05	Fe/WR6	7-7-7
49309	HD 19356	03h 01m 7	+40° 34'	00:06	00:19	06:19E	+41°01'	Fe/WR6	21-21
49310	"	"	"	00:27	00:43	05:56E	"	"	5-5
49311	"	"	"	00:48	01:51	05:47E	"	"	11-11
49312	"	"	"	00:53	00:56	05:42E	"	"	11-11
49313	"	"	"	00:58	01:01	05:37E	"	"	11-11
49314	"	"	"	01:04	01:14	05:24E	"	"	21-21
49315	"	"	"	01:16	01:19	05:19E	"	"	11-11
49316	"	"	"	01:21	01:24	05:14E	"	"	11-11
49317	"	"	"	01:26	01:28	05:09E	"	"	11-11

Spectr. Temp. 72°F ..... Dome Temp./Hum. 68°F/57% .. Transparency Conditions . Lt. Cirrus ..... 276.

Focus ... 504 .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
3 Filter 50009	1-2	7.10	B7nm	BC	1200/50.7	BS	IIIa-JFg	A	Be-Blu		
					1200/50.7	BS	IIa-0E	A		T=72°F Focus=504	
3 Filter -0000		5.19	133 IV	BC	1200/50.7	BS	IIIa-Jfg	A	SB-Blu		fine
							IIIa-Jfg				
3 Filter 34001		6.22	1FB + GG	BC	1200/50.7	BS	IIa-0E	A	SB-Blu/Ly		
							IIaw-E			T=72°F	
3 Filter 4447		7.2	B0 IV	BC	1200/50.7	BS	IIa-0E	A	SB-Blu/Ly	T=71°F	
3 Filter 75-33		2.1-3.2	FB V	BC	1200/50.7	BS	IIIa-JFg	A	EB-Blu	T=69°F	
3 Filter 66-12		"	"	"	"	150/07	IIIa-Jfg	A	"		
3 Filter 20012		"	"	"	"	BS	IIa-0E	A	"		
3 Filter 00027		"	"	"	"	"	IIa-0E	A	"		
3 Filter 20013		"	"	"	"	"	IIa-0E	A	"		
3 Filter 77629		"	"	"	"	"	IIIa-Jfg	A	"	T=68°F	
3 Filter 20013		"	"	"	"	"	IIa-0E	A	"		
3 Filter 2009		"	"	"	"	"	IIa-0E	A	"		
3 Filter 20029		"	"	"	"	"	IIa-0E	A	"		

A7 Cont. Page 2

Date 1985/08/2-3 Fri-Sat ..... Observers .....

Emulsion Batches:
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp
						①17.5V ②15V ③15V			
49317T	SPOT CALN FOR PLATES 49309-10, 14, 18, 22, 26, 30, 34, 38, 42					15MIN@D4 3900	4300	4810	
49318	HD19356	03h01m.7	+40° 34'	01:30	01:39	04:58E	+41° 01'	Fe/WR6	21-21
49319	"	"	"	01:42	01:44	04:54E	"	"	11-11
49320	"	"	"	01:46	01:49	04:49E	"	"	11-
49321	"	"	"	01:51	01:53	04:45E	"	"	11-11
						①17.5V ②15V ③15V			
49321T	SPOT CALN FOR PLATES 49309-10, 14, 18, 22, 26, 30, 34, 38, 42					15MIN@D4 3900	4300	4810	
49322	HD19356	03h01m.7	+40° 34'	01:55	02:05	04:33E	+41° 01'	Fe/WR6	21-21
49323	"	"	"	02:07	02:10	04:28E	"	"	11-11
49324	"	"	"	02:12	02:15	04:23E	"	"	11-11
49325	"	"	"	02:18	02:21	04:17E	"	"	
49326	"	"	"	02:26	02:37	04:01E	"	"	21-2
49327	"	"	"	02:41	02:44	03:54E	"	"	11-11
49328	"	"	"	02:47	02:50	03:48E	"	"	11-11
49329	"	"	"	02:53	02:56	03:42E	"	"	11-11
						①D4 ②D3 ③D2			
49329T	SPOT CALN FOR PLATES 49307-8, 11-13, 15-17, 19-21, 23-25, 27-29					15MIN @ 15VOLTS 3900	4300	4810	
49330	HD19356	03h01m.7	+40° 34'	02:54	03:11				

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions ..... 278.

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
							IIIaJ				
3" Iter 75027		2.1 – 3.2	B8V	Bc	1200/50.7	BS	IIIa-J fg	A	EB-Bln		
3" Iter 20033		"	"	"	"	"	IIa-O E	A	"	T=67°F F=505	
3" Iter 19981		"	"	"	"	"	"	A	"		
3" Iter 20046		"	"	"	"	"	"	A	"		
							IIIaJ				
3" Iter 75026		2.1 – 3.2	B8V	BC	1200/50.7	BS	IIIa-J fg	A	EB-Bln		
3" Iter 20032		"	"	"	"	"	IIa-O E	A	"		
3" Iter 20033		"	"	"	"	"	"	A	"		
3" Iter 20025	2"	"	"	"	"	"	"	A	"		
3" Iter 75026		"	"	"	"	"	IIIa-J fg	A	"	T=67°F	
3" Iter 10348		"	"	"	"	"	IIIa-O E	A	"		
3" Iter 20025		"	"	"	"	"	"	A	"		
3" Iter 20023		"	"	"	"	"	"	A	"		
							IIaO E				
3" Iter 75026		2.1 – 3.2	B8V	BC	1200/50.7	BS	IIIa-J fg	A	EB-Bln		

279 Page 3 cont.

Emulsion Batches: 8"68 IIIaD-E 06114-31075

Date 1968/08/23 Observers .....

F-1 Sat

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49331	HD 19356	03h01m7	+40° 34'	03:13	03:17	03:21E	+40° 01'	F6/WG6	11-11
49332	"	"	"	03:20	03:23	03:15E	"	"	11-11
49333	"	"	"	03:25	03:29	03:09E	"	"	11-11
49334	"	"	"	03:32	03:43	02:54E	"	"	21-21
49335	"	"	"	03:45	03:48	02:49E	"	"	11-11
49336	"	"	"	03:50	03:54	02:43E	"	"	11-11
49337	"	"	"	03:56	04:00	02:37E	"	"	11-11
49337T	SPOT CAL'N FOR PLATES 49331-33, 35-37, 39-41					15MIN@15VOLTS		①D4 3900 ②D3 4300 ③D2 4810	
49338	HD 19356	03h01m7	+40° 34'	04:02	04:15	02:22E	+40° 01'	F6/WG6	21-21
49339	"	"	"	04:17	04:22	02:15E	"	"	11-11
49340	"	"	"	04:24	04:28	02:09E	"	"	11-11
49341	"	"	"	04:30	04:35	02:04E	"	"	11-11
49341T	SPOT CAL'N FOR PLATES 49331-33, 35-37, 39-41					15MIN@15VOLTS		①D4 3500 ②D3 4300 ③D2 4810	
49342	HD19356	03h01m7	+40° 34'	04:37	04:52	01:45E	+40° 01'	F6/WG6	21-21

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions 280

Focus ... 505 .....

Spectr. Temp. .66°F..... Dome Temp./Hum. .16°C./86%

Comparison Type/Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	BF Iter 20007		2.1 – 3.2	B8V	BC	1200/50.7	BS	IIa-O E	A	EB-Bln		
	B Filter 20025		"	"	"	"	"	"	A	"		
	B Filter 20009		"	"	"	"	"	"	A	"		
	B Filter 74999		"	"	"	"	"	IIIa-Jfg	A	"	T=66°F	
	B Filter 20012		"	"	"	"	"	IIa-O E	A	"		
	B Filter 20026		"	"	"	"	"	"	A	"		
	B Filter 20026		"	"	"	"	"	"	A	"		
								IIa-O-E				
	B Filter 75006		2.1 – 3.2	B8V	BC	1200/50.7	BS	IIIa-Jfg	A	EB-Bln		
	B Filter 20025		"	"	"	"	"	IIa-O E	A	"		
	B Filter 20013		"	"	"	"	"	"	A	"		
	B Filter 20016		"	"	"	"	"	"	A	"		
								IIa-O-E				
	B Filter 75030		2.1 – 3.2	B8V	BC	1200/50.7	BS	IIIa-Jfg	A	EB-Bln		

281

Date 1985/08/3-4 SAT-Sun Observers Blu - Ri

5"68° Emulsion Batches: Hariet 291-17075

8"68° IIaO-E 06114-03085

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49343F	Focus Test					00 05 W	+24° 40′	Fe/WR6	2-2-2
49343	HD138749	15h 28m.9	+31° 42′	20.00	20:19	01:19 W	+31° 32′	Fe/WR6	2-2-2
49344	HD164852	17h 58m.1	+20° 50′	20.23	21:09	00:20 E	+20° 55	Fe/WR6	14-14
49344T ✓	SPOT CAL'N FOR PLATES: 49343-49, 48,				15 MIN @ D4	① 17.5V 3900	② 15V 4300	③ 15V 4810	
49345	HD157482	17h 18m.5	+40° 04′	21:14	23:16	02:27 W	+40° 07	Fe/WR6	7-7-7
49345T ✓	SPOT CAL'N FOR PLATES 49345-47.				15 MIN @ 15 VOLTS	① D4 3900	② D3 4300	③ D2 4810	
49346	HD217312	22h 51m.8	+62° 32′	23:23	02:35	00:10 W	+63° 07′	Fe/WR6	7-7-7
49347	HD217911	22h 53m.2	+43° 31′	02.40	03:49	01:21 W	+44° 04	Fe/WR6	7-7-7
49348	HD11241	01h 45m.5	+54° 39′	03:54	04:43	00:34 E	+55° 12′	Fe/WR6	14-14-14

Spectr. Temp. 75°F ..... Dome Temp./Hum. 71°F/57% Transparency Conditions Lt. Altocumulus at start 282

Focus 503 .....

Spectr. Temp. ..... Dome Temp./Hum. 17°C/80% .

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				BC	1200/50.7	BS	IIa-0E	A		T=75°F F=503	
5000	1-2	4.10	137mm	BC	1200/50.7	BS	IIIa-Jfg	A	Be-Blu		v sl str
7000		5.20	B=IV	BC	1200/50.7	BS	IIIa-Jfg	A	SB-Blu		
							IIIa-Jfg				
2000		6.22	F8 + G8	BC	1200/50.7	BS	IIa-0E	A	SB-Blu/Ly	SOME CLOUDS	
							IIa0-E				
12000	2	7.2	B=IV	BC	1200/50.7	BS	IIa-0E	A	SB-Blu/Ly	T=72°F F=504	v sl/wk
6000		6.38	B=V	BC	1200/50.7	BS	IIa-0E	A	SB-Blu	T=70°F	
7000		5.4	B=V	BC	1200/50.7	BS	IIIa-Jfg	A	SB-Blu	T=68°F	

283

Date 1985/08/4-5 SUN-MON Observers Lg+ - Ri

Emulsion Batches:
5m 68° IIIaF ets 2911-17075
IIIaF ets 2911-25075
8m 68° IIaD-E 06114-02095

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49349	HD 8890	1h 22.6	+88° 46'	20:08	20:11	9h 46m E	89° 16'	Fe/	11-11
49349F	FOCUS TEST							"	25-2
49350	HD 8890	"	"	20:14	20:17	9h 41m E	89° 16'	"	11-11
49351	HD 137909	15h 23.7m	+29° 27'	20:33	21:06	2h 16m W	29° 15'	"	21-2
49352	HD 159561	17h 30.3m	+12° 38'	21:12	21:18	0h 21m W	12° 42'	"	21-2
49353	HD 183912	19h 26.7	+27° 45'	21:33	22:07	0h 46m E	28° 02'	FeNe/	8-8-6
49354	HD 202109	21h 8.7m	+29° 49'	22:13	22:48	1h 47m E	30° 16'	"	8-8-8
49354T	SPOT CAL FOR PLATES 49351				15 MIN @ D4	①17.5V 3900	②15V 4300	③15V 4810	
49355	HD 215182	22h 38.3m	+29° 42'	22:54	23:22	2h 43E	30° 15'	FeNe/	8-8-8
49355T	SPOT CAL FOR PLATES 49353-54				15 MIN @ 15 VOLTS	① D4 3600	② D4 3900	③ D3 4300	
49356	HD 182640	19h 20.5m	+2° 55'	23:33	00:02	1h 15m W	+3° 12'	Fe/	21-21
49357	HD 165908	18h 03.2m	+30° 33'	00:08	00:47	3h 18m W	30° 40'	"	7-7-7
49357T	SPOT CAL FOR PLATES 49352,56,58				15 MIN @ D4	①17.5V 3500	②15V 4300	③15V 4010	
49358	HD 196524	20h 32.9m	+14° 15'	00:53	01:23	1h 23m W	14° 40'	Fe/	21-2
49359	HD 3712	0h 34.8m	+55° 59'	01:36	02:00	2h 02m E	56° 32'	FeNe/	12-1
49360	HD 8538	1h 19.3	+59° 43'	02:10	02:27	2h 19m E	+60° 15'	"	12-1

Spectr. Temp. 76°F ..... Dome Temp./Hum. 71°F/65% Transparency Conditions ... haze heavy at first 284

Focus ... 503 ..... no cloud

Spectr. Temp. 68°F ..... Dome Temp./Hum. 63°F/97% New D-19 for IIaO's

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
10017	3"	2	F-	Bc	1200/50.7	BS	IIaO-e	A	asm-sp/KK		fe-s/s+ fine
"	"	"	"	"	"	"	"	"			ca-fe-s/Rod
10 000	"	"	"	"	"	"	"	"	asm-sp/KK		fine
30 006	"	3.93	Fop	"	"	"	IIIaJ-fg*	"	"		
27 935	"	2.2	A5III	"	"	"	IIIaJ-fg	"	"		fine
20 065	"	4.2	K5II	"	1200/47.0	150/.5	IIaO-e	"	KK/UV	757 503	fine
20 011	"	4.2	G8II	"	"	"	"	"	KK/UV ηPg Std		
							IIIaJ-fg*				
20070	"	3.8	G8II	"	"	"	IIaO-e	"	KK/UV	plate broken in 2 pieces	
							IIaO-E				
30038	"	3.08	FoIV	"	1200/50.7	BS	IIIaJ-fg	"	asm-sp/KK	72°F 504	fine
10003	"	5.5	F7V	"	"	"	IIaO-E	"	"		
							IIIaJ-fg				
30186	"	V=3.78	F5IV	"	"	"	IIIaJ-fg	"	"		fine
20070	"	3.42	K0I	"	1200/47.0	150/.5	IIaO-E	"	KK/UV ηPg Std.		good
30086	"	2.81	A5V	"	"	"	"	"	KK/UV Std.	scattered clouds	fine

1985 Cont #2

Date 1985/08/4-5 SUN-MON Observers Lgt - Ri

8th GB Emulsion Batches: IIaD E 1D5-04085

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
							① P2 ② P2		
49360T	SPOT CALIB FOR PLATES 49360-62.					15M/NE 15 VOLTS	3600 3900		
49361	HD 17878	2h 47.2	+52° 21'	02:35	04:03	2h 12m E	+52° 48'	Fe Ne/ WR6+ND6	12-12
49362	HD 18925	2h 57.6	+53° 07'	04:08	04:41	1h 45m E	+53° 33'	"	12-15
	MON AUG 5								
49363T	TEST SPOT PLATES FOR NEW BATCH 1D5					15M/NE@15VOLTS	① P4 3900	D3 4300	P2 4800

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions .....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Comparison Type/Filter/ Exp.	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
								IIaO-E				
	20007	3"	V=3.09	G5III + A5	BC	1200/470	150/.5	"	A	KK/UV	69°F 504	good
	17003	"	B=3.63	G8III + A3V	"	"	"	"	"	"	9=68°F	
							"	IIaO-E				weak

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Wed-Thurs

Date 1985/08/07-08 Observers Gr-Tu

Emulsion Batches:
5" 68° IIIaJ-Efg 29114 -25075
IIIaJ-Efg -04085

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49363	HD 184006	19 27.2	+51 31	23 51	00 23	1 43 W	+	Fe/wt 6	15-15-1
49364	HD 192514	20h 10.7	46° 21'	00 39	01 55	2 30 W	+4653	"	14-14-14
49364T	Spot Calib for	49363-65			15min@04	17.5V 3900	15V 4300	15V 4810	
49365	HD 220061	23 15.7	+23 11	00 00	03 09	0 38 W	+2347	Fe/wt 6	14-14-14
49366	HD 5448	00 51.2	+37 57	03 15	03 43	0 22E	+3833	"	21-21
49366T	Spot Calib for	49366-69			15min@04	17.5V 3900	15V 4300	15V 4810	
49367	HD 13161	02 3.6	+34 31	03 51	04 06	1 13 E	+	Fe/wt 6	14-14-14
49368	HD 11636	01 49.1	+20 19	04 10	04 20	0 42 E		"	21-21
49369	HD 8538	01 19.3	+59 43	04 27	04 38	0 03 W		"	21-21

Spectr. Temp. 74°F ..... Dome Temp./Hum. 70°/97% Transparency Conditions hazy - Fine .....

Focus ..... 5.04 .....

Spectr. Temp. ... 70°F ..... Dome Temp./Hum. 65°/95% .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
B. filter 40022	2"	3.93	A5V$_n$	BC	1200/507	BS	IIIaJ-Eeg	A	A star		fine
B. filter 40116	2"	4.92	A5III$_n$	"	"	"	"	A	"	N star in close fld	
							"				Poor
B. filter 40139	2-4"	4.77	A5V	BC	1200/507	BS	"	A	A star pgm	T=73°C	
B. filter 40,000	"	4.00	A5V	"	"	"	IIIaJ-Eeg	A	"		fine
							"				"
B. filter 40709	2"	3.14	A5III	BC	1200/507	BS	"	A	A star pgm		fine
B. filter 37823	2-3"	2.77	A5V	"	"	"	"	A	"		
B. filter 39465	"	2.81	A5III	"	"	"	"	A	"		

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Date 1985/08/8-9 THUR-FRI Observers . B.M.-T.M.

Emulsion Batches:
5"68° IIaO-fg -04085
8"68° IIaO-E 10.5 -04085 ①

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49370	HD 138749	15H 28M 9	+31° 42'	20:05	20 45	2 05W	+31 31	Fe/WR6	21-21
						175V	15V	15V	
49370	Spot Calib for	49370-72, 82-89		15 min @ D4		3900	4300	4810	
49371	HD 164852	17H 58M 1	+20° 50'	21:24	22 23	01 13W	+20 56	Fe/WR6	14-14
49372	HD 19356	03H 01M 7	+40° 34'	22 32	23:08	07 06E	+40 59	Fe/WR6	21-2
49372T	2nd Spot Calib for	49370-72, 82-89		15 min @ D4		175V 3900	15V 4300	15V 4810	
49373	HD 19356	03H 01M 7	+40° 34'	23:11	23:30	06:45E	+40° 59'	Fe/WR6	11-1
49373T	Spot Calib for	49373-81		15 min @ 15V		D4 D3 D2 3900 4300 4810			
49374	HD 19356	03H 01M 7	+40° 34'	23:33	23:45	06:30E		Fe/WR6	11-1
49375	"	"	"	23:48	24:00	06:15E		"	11-11
49376	"	"	"	00:03	00:12	06:03E		"	11-
49377	"	"	"	00:15	00:23	05:52E	+40°58'	"	11-1
49378	"	"	"	00:25	00:34	05:41E		"	11-11
49379	"	"	"	00:36	00:46	05:29E		"	11-11
49380	"	"	"	00:50	00:58	05:17E		"	11-11
49381	"	"	"	01:01	01:08	05:07E		"	11-11
49382	"	"	"	01:11	01:27	04:48E		"	2-2

Spectr. Temp. 76°F ..... Dome Temp./Hum. 74°F/60% .. Transparency Conditions thin cirrus ..... 290 ....

Focus ..203.....

Spectr. Temp. ..... Dome Temp./Hum. ...../.....

Comparison Type/Filter	Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
		50622	2"	4.10	B7nm	BC	1200/50.7	BS	IIa-J fg	A	Be-Bln	T=76°F F=503	slight F-C
									IIIa-J fg				✓
		40113	2"	5.19	B3IV	BC	1200/50.7	BS	IIIa-J fg	A	SB-Bln	T=76°F	fine
		20290	5"	2.1-3.2	B8V	BC	1200/50.7	BS	IIIa-J fg	A	EB-Bln		
									IIIa-J fg				✓
		207		2.1-3.2	B8V	BC	1200/50.7	BS	IIa-O E	A	EB-Bln		
									IIa-O E				✓✓
		20271		2.1-3.2	B8V	BC	1200/50.7	BS	IIa-O E	A	EB-Bln		str ✓
		20219	3"	"	"	"	"	"	IIa-O E	A	EB-Bln	T=74°F	✓
		20100		"	"	"	"	"	"	A	"		Fe str ✓
		20183		"	"	"	"	"	"	"	"		✓
		2337		"	"	"	"	"	"	"	"	T=79°F	✓
		20207		"	"	"	"	"	"	"	"		✓
		20214		"	"	"	"	"	"	"	"		✓
		20236		"	"	"	"	"	"	"	"		
		20169		"	"	"	"	"	IIa JFg	"	"		✓ strong

Page 291/2

Date 1935/08/8-9 THUR-FRI Observers R Lu - T

Emulsion Batches:

* III a-f.g 08085

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49383	HD 19356	03H01M.7	+40°34'	01:29	01:43	04:32E	+40°59'	F2/WR6	21-21
49384	"	"	"	01:46	01:59	04:16E	"	"	21-21
49385	HD 19356	"	"	02:01	02:12	04:03E	"	"	21-21
49386	"	"	"	02:14	02:24	03:51E	"	"	21-21
49387	"	"	"	02:27	02:36	03:39E	"	"	21-21
49388	"	"	"	02:38	02:48	03:27E	"	"	21-21
49389	"	"	"	02:51	03:01	03:14E	"	"	21-21
49390	"	"	"	03:04	03:13	03:02E	"	"	21-21
49390T	Spol Calc for	49390-93			1 min 1/4	12.5V 15V 3900 4300	14V 4010		
49391	HD 19356	03H01M.7	+40°34'	03:16	03:31	02:44E	+40°59'	F2/WR6	21-21
49392	"	"	"	03:35	03:54	02:21E	"	"	21-21
49392T	2nd Spol Calc for	49390-93			15m @ 1/4	17.5V 15V 3900 4300	14V 4010		
49393	HD 19356	03H01M.7	+40°34'	04:07	04:34	01:41E	+40°59	F2/WR6	21-21

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions 292

Focus .....

Spectr. Temp. 71°F..... Dome Temp./Hum. T=65°F/90%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
5' 1hr 70097		2.1– 3.2	B3V	BC	1200/50.7	B5	IIIa-J fg	A	EB-Blu	Fe s/ str strong	✓
12' 1hr 70069		"	"	"	"	"	"	"	"	T=73°F	✓
10' 1hr 70081	2"	"	"	"	"	"	"	"	"	T=73°F	✓
8' 1hr 70174		"	"	"	"	"	"	"	"		str ✓
3' 1hr 70192	3"	"	"	"	"	"	"	"	"		✓
5' 1hr 70264		"	"	"	"	"	"	"	"	—	✓
2' 1hr 70095		"	"	"	"	"	"	"	"	Maybe fogged slightly T=72°F E=504	✓
2' 1hr 70113		"	"	"	"	"	IIIa-J* fg	"	"		strong * ✓
							IIIa-J* fg				✓
5' 1hr 70003		2.1– 3.2	B3V	BC	1200/50.7	B5	IIIa-J* fg	A	EB-Blu		
5' 1hr 69962		"	"	"	"	"	"	"	"		✓
							"				✓
2' 1hr 71170		2.1– 3.2	B3V	BC	1200/50.7	B5	"	A	EB-Blu	T=71°F	

* this plate was not completely immersed in first fixer – may not be reliable

293

Fri-Sat

Date 1985.08.9-10..... Observers ..Gray-Tan.....

Emulsion Batches:
..Ma-fg.....-08085
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
49394	HD 159561	17 30.3	12° 38'	19 59	20 05	0 35 E		Fe/uv6	19-2
49395	HD 154029	16 57.9 Tan ~~17 1.0~~	+33 43 Tan ~~33° 35'~~	20 11	21 47	1 42 W	+33 43	n	~~14-14~~
49395T	Spot calib for	49394 - 96 + 49398 (not taken) 15min @ D4				17.5V 3400	15V 4300	15V 4810	
49396	HD 165777	~~18 0.6~~ 18 0.6 Tan	~~9° 34'~~ + 9 33 Tan	21 52	22 32	1 22 W	+9 39	Fe/uv6	20-14

Spectr. Temp. 80°F Dome Temp./Hum. 75°F / H=75% Transparency Conditions S/hazy - foggy 294

Focus 5.0.7

Spectr. Temp. 77°F Dome Temp./Hum. 72°F / 98%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
2 filter 40907	2"	2.2	A5 III	BC	1200/507	BS	IIaO-fg	A	Astar pgm		fine
2 filter 40220	2-3"	5.27	A3 V	"	"	"	"	A	"		fine
							"				
3 filter 39987	2-3	3.85	A4 V	BC	1200/507	BS	"	A	Astar pgm		fine

295 Sat-Sun

Date August 10-11/85 Observers BT-TM

Emulsion Batches:
09802E 20075

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49397	HD182917	19 21.9	+50 02	23:49	03 24	5 02 W	+50 21	Fe/- No 1-	7-7-7 14-7
49397T	Spot Color for	49397, 49401 (next night)			15 min @	D315V 9810	D17V Hd	D27V 5450	
	3rd attempt to locate P/Halley (1982i). Used new eyepiece								
49398	HD12929	2 01.5	+22 59	04 14	04 35	0 29 E	+23 29	Fe/w6	2020

20075

Spectr. Temp. 76°f Dome Temp./Hum 66°F/96% Transparency Conditions Clearing 29¼

Focus 503 Milky Way clear + Low Perseids

Spectr. Temp. 67°f Dome Temp./Hum 61°F/99%

Comparison Type/Filter	Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/- 7-7		NO FILTER		V			1200/*					* tilt set with increasing Angle	
No 1- 14-		39836	4-10"	84	M6	BC	/40.5	BS	098 02E	A	Obs Pgm	very bad seeing	
DDT									098-02E				VG
5450													
											*Shutter - 3 passes		
Fe													
		BLUE FILTER											
Fe/Ar		5322	5"	2.2	K2	BC	600/507	BS	IIIa-J-Fog	A	stellar		Fine

297 Sun - Mon

Date August 11-12/85 Observers BH - TA

Emulsion Batches:
IIaO-E 04085
.....
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49399	HD 8890	1 22.6	+88 46	19 58	20 04	9 26E	+89 16	Fe/W6	11-11
49399F	Focus Test					0 W	+	Fe/W6	100-110
49400	HD 8890	1 22.6	+88 46	20 08	20 13	9 17E	+89 16	"	11-11
49401	HD 182917	19 21.9	+50 02	20 22	23 51	1 31W	+50 18	Fe/- Ne/- D2	7-7-7 7-7-7
49401T	Spot Calc for 49399	19 00,03,	04,05,08,09		15min	e 15V	D4 3400 D3 4300	4810	
49402	HD 207076	21 41.4	-2 40	23 57	02 00	1 20W	-2 10	Fe/- Ne/-	7-7-7 7-7-7
49403	HD 224427	23 52.7	+24 35	02 06	03 18	0 25W	+25 09	Fe/W6	5-5-5
	4/4 a Horizontal to locate (not Halley - it's left								

Spectr. Temp. 71°F ..... Dome Temp./Hum 65°F/23% Transparency Conditions Fine 298

Focus . 50.4 .....

Spectr. Temp. 61° ..... Dome Temp./Hum. 57°F/99%

Comparison Type Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe	BLUE FILTER					1200						
	0514	4"	2	F	BC	/50.7	BS	IIaO-E	A	KK Asm Sp		fine
Fe					"	"	BS	IIaJ-Esp	A			Center vsl/red
"	BLUE FILTER											
"	0306		2	F	"	"	"	IIaO-E	A	KK Asm Sp		fine
Fe	O FILTER		V			1200					* & Black filter holder in	
Ne	2899	3-4"	8.4	Mb	"	/405	"	098 02E	A	Obs Pgm	T = 70°F F = 504	fine
								IIaO-E			broken 2 pieces	v
Fe	IO FILTER					1200						
Ne	3523	3-5"	7.89	M3III	"	/405	"	098 02E	A	Obs Pgm	sel 507 T = 63°F	sl wk
Fe	BLUE FILTER											
/U62	3490	3"	6.25	M3III	"	1200/50.7	"	IIaO-E	A	Archive	507 T = 61°	fine
	Bad	Fair	er field of		area	was	OK					

299

Mon-Tues

Date August 12-13/85 Observers KB-TM/JD Dickenson

Emulsion Batches:
IIa0-E 105 – 04085
098 – 20075

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49404	HD8890	1 22.6	+88 46	20 18	20 23	9 04E	+89 16	Fe/Wr6	11-11
49405	"	"	"	20 27	20 29	8 57E	"	"	11-11
49406	HD182917	19 21.9	+50 02	20 40	22 06	0 16E	+50 19	Fe/- Ne/-	7-7-7 7-7-7
49407	HD207076	21 41.4	-2 40	22 05	23 05	1 31E	-2 11	Fe/- Ne/-	7-7 7-7
49408	HD190390	19 59.6	-11 53	23 23	01 54	2 57W	-11 33	Fe/Wr6	3-3-3
49409	HD222368	23 34.8	+5 05	02 02	02 12	0 17E	+5 38	Fe/Wr6	11-11

looked at NGC7331 and near by galaxies in same region

looked at Stefan's quintet

test objects for P/Halley (1982i)

conditions too poor to make an attempt to locate comet

Spectr. Temp. 67°F Dome Temp./Hum 64°F / 76% Transparency Conditions cloudy 300
Some Aurora
Focus 505
Spectr. Temp. 63°F Dome Temp./Hum. 58°F / 99%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
BLUE FILTER 0077	2"	2	F	BC	1200/507	BS	IIaO-E	A	KK Abs Sp		fine
BLUE FILTER 0013	2"	"	"	"	"	"	"	A	KK Abs Sp		fine
NO FILTER 50051	2"	V 8.4	M_b	"	1200/405	"	OTE	A	Obs Pgm	Blank filter in no spot focus	fine
NO FILTER 50141	3"	7.89	M>III	"	"	"	"	A	Obs Pgm	cloud	fine
BLUE FILTER 3400	3"	6.86	F>III	"	1200/507	150μ/1.0	IIaO-E	A	Fe+G Pgm	hazy star weak –	comp. strong
BLUE FILTER 3315	3-5	4.6	F>V	"	"	BS	"	A	Std Vel		fine exp comp str.
										Tr. too cloudy	

201 Fri-Sat

Date August 16-17/85 Observers BT-Ta/...Tenagy Dickinson

Emulsion Batches:
IIaO-E 01085
.....
.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
~~49410~~	HD 8890	1 22.6	+88 46	19 46	19 48	9 22E	+89 16	Fe/W#6	11-11
~~49411~~	"	"	"	19 53	19 55	9 15E	"	"	11-11
~~49412~~	HD190390	19 59.6	-11 53	20 14	01 35	2 56W	-11 31	Fe/W#6	2 2
~~49412T~~	Spot Calc for 49410-				15min	15V 3900 04	4300 03	02 4810	
~~49413~~	HD222368	23 34.8	+5 05	01 41	01 57	0 16E	+5 39	Fe/W#6	3-3
~~49413T~~	Focus Test							"	10-10

5th attempt to locate P/Halley (1982i)
No luck - Correct Fld found but sky getting too brt.

Spectr. Temp. 74°F ..... Dome Temp./Hum. 70°F/57% Transparency Conditions Fine 302

Focus ..... 503 .....

Spectr. Temp. ..... Dome Temp./Hum. 60°F/80%

Comparison Type/Filter/ Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Fe/ W16	BLUE FILTER 0123	1"-2"	2	F	BC	1200/ 150.7	B5	IIaO-E	A	KK Asm Sp		
" "	BLUE FILTER 0204	"	"	"	"	"	"	"	A	KK Asm Sp		
Fe/ W16 2	BLUE FILTER 8445	2-3	6	86	F III	"	"	150μ 1.0	IIaO-E IIaO-E	A	Fe/rG Pgm	Comp fld known
Fe/ W16 3 3	BLUE FILTER 8115	2"	4.6	F-II	BC	1200/ 150.7	150μ 1.0	IIaO-E	A	Std Vel	T=68°F F=505	
" 10					"	"	"	IIaO-E	A		T=67.5° "	

Plates discarded because grating cover discovered to have been left on all night!

303 Sat-Sun

Date August 17-18/85 Observers BT-RI

Emulsion Batches:
OR 15103-15085
IIaO ... 105-04085

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49410	HD182917	19 21.9	+50 02	22 46	00 21	~~2 25E~~ 2 25W Tm	+50 19	Fe/-	7-7-
								Ne/-	7-7-
49411	HD207076	21 41.4	-2 40	00 29	01 31	1 14W	-2 10	Fe/-	7-7-
								Ne/-	7-7-
49411T	SPOT PLATE FOR PLATE 49410+11			15MW	OP3 4B10	15V ② D1 7V ③ D2 7V HD -54D			
49411F	Focus Test							Fe/-	20-2
								Ne/-	20-2
49412	HD9138	1 24.9	+5 38	01 45	02 51	1 10E	+06°09	Fe/WR6	7-7
49413	HD219576	23 11.7	-8 16	02 58	03 55	2 07W	-7 42	"	7-1
	6th attempt to locate P/Halley (1982i)					100%	sure fail		

Spectr. Temp. 73°F Dome Temp./Hum. 17°C/90% Transparency Conditions

Focus 505

Spectr. Temp. Dome Temp./Hum. 16°C/95%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
NO FILTER 49999	2"-3"	V 8.4	Mb	BC	1200/40.5	BS	O98 02E	A	Obs Pgm		Fine
NO FILTER 50031	3"-4"	7.89	M7III	"	"	"	"	A	Obs Pgm	T=70°F F=505	fine
											VV
				BC	1200/40.5	BS	O98 02E	A		T=68°F F=505	OK
B" FILTER 3000	4"	5.1	K4III	BC	1200/30.7	BS	IIaO-E	A	Std Vel	T=68°F F=304	Fine
BLUE FILTER 7805		6.66	M3III	"	"	"	"	A	Archive - BS	CUT SHORT, NOT ENOUGH TIME TO GET FULL EXP.	slow

Emulsion Batches:

Date Tues.Wed. Aug 27-28 Observers Ly-Ri

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
4914	HD 190390	19 59.6	-11° 53	21.00	22:46	00 SOW	-11° 28	—	—

Fri-Sat
August 30-31/85 Ly-Ri

sky cleared at 1:00 est but dome too wet
and humidity too high for observing

Spectr. Temp. 72°F ..... Dome Temp./Hum. ..... Transparency Conditions full moon haze? 30.0

Focus ..... 50.4 .....

Spectr. Temp. ..... Dome Temp./Hum. ..... comparison not available

Comparison Type/Filter	Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
-	-	H2 FILTER 7716	3'	✓ 6.34	FLIII	BC.	1205/- 40.1	Yellow BS.	098	A	Fe rg pgm	clouded up	ok

307 Sat-Sun

Date August 31 - Sept 1/85 Observers BH-RI

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
	Pocket Spectrograph			19:31	00:30				
Sun Mon	SEPT 1, 1985		KK-RI						
494.4T1	COMPARISON TEST					#1 FeNe		COMP/STELLAR	40/4
494.4T2	"					#2 Fe A		COMP/STELLAR	150/15
494.4T3	"			20:10		#2 Fe A		STELLAR	4M1
494.4T4	"					#3 FeNe		COMP/STELLAR	40S/40S
	Sept 3, 1985	KL							
494.4T5	comp. test					#1 FeNe		comp only	20

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions 308

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
										Clouds	
				B.C.	1200/50.7	B.S	IIaO	A		9:65°F F:505	sl. strong uneven
				"	"	1.50	IIaO	A		"	sl weak
					1200/40.5	150	098	A			weak
					"	BS	"	A			Ne ok
					1200/50.7	BS	IIaO	A		exp ok Still uneven need to try comp focus next	

309 Mon-Tues

Date Sept 23/85 Observers BH-TN

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
	Palet Spectrograph			19:41	22:30				
	+ test TV camera			focus	20:20	20:50			
	with HD176411			V=4.02	B=5.10		focus normal		
	and HD185663			V=7.7	B=8.9		" "		
	Scale 6-7	↓							
191AT7	Comparison Test						#1	FeNe	20
191AF1	Focus test	1200/507					#1	FeNe	20/2
191AT8	Comp test	1200/405					#1	FeNe	4
F2	Focus						#1	FeNe	4/1
T9	Comp test						"	"	20
F3	Focus						"	"	20/2
T10	Comparison — Penscope pulled out of the way								2

Spectr. Temp. ..... Dome Temp./Hum. 64°F/97% Transparency Conditions ... Semi Cloudy 310

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. 64°F/97%

I saw 5 meteors while only totally observing sky. 4 from North, most were small, some bit.

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
										Getting too wet on roll off dome	
	3"										
	"										
		505	75°F		1200/40.5	BS	D98	A			
		507	73°F		1200/40.5	BS	D98	A			
					1200/40.5	BS	D98	A			
					1200/50.7	BS	II-O	A			
					1200/50.7	BS	II-O	A			
					1202/40.5	BS	D98	A			

311

Date Sept 6 1955 Observers Tm KK (Emy)

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
T11	Comparison	Periscope out					#1	FeNe	30
T12	Comparison	Periscope IN					"	"	30
T13	repeat of	T11							
4 9414 F4	Focus Test	(Periscope Prism out)				0 0	-10°00'/#1	FeNe	2 3
4-1414 T14							"	"	2
T15		(Periscope Prism in)		ie East prism blocking some comp light			"	"	3
F5	Focus test	"					"	"	2½
T16	Repeat of T15	"					"	"	3½

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions .....

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				BC	1200/50.7	BS	IIaJ	A			
				"	"	"	"	"			
				BC	1200/50.7	BS	IIIaJ-E	A	All Set 504 T=69.5°		Cent Strad
Note - Time used 2+2×10 but actual time recorded on plate											
									Fine tune exposures. Listen → Tape edit		Fad
							Lower comp water when viewed with Red on right & emulsion up. (Guangyou)				
				∴ West side of plate in holder gets less light.							

Comparison Type/Filter E

313 Tues-Wed

Date Sept. 10-11.185 Observers J.m

8-68 Emulsion Batches: II a-E 18085

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49415	HD201867	21 36.3	-6 01	2317	2333	1 06 W	-5 28	Fe/c	7-7
49416	HD212943	22 22.8	+4 12	2338	0103	1 38 W	+4 38	"	5-5
49417	HD129979	02 06.5	+12 59	0108	0115	1 50 E		"	6-6
49417F	Focus test					1 50 E	+23°	"	11-11

Spectr. Temp. 63° Dome Temp./Hum. 50°/60% Transparency Conditions clear, very bad seeing 314

Focus 506

Spectr. Temp. 61 Dome Temp./Hum. 48°/60%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
5:53	4"	37	G016	BC	1200/507	BS	IIaD	A	std vel	screened	OK
5:50	4-10"	59	K0	"	"	"	"	A	"	more cloud	Exp 3X comp instead
8:45	4"	32	K2	"	"	"	"	A	"		OK
				"	"	"	"	A		set 506 T 61°F	Cancelled

315

Date SEP-TNUR SEPT. 11-12/85 Observers ...Rit-y.....

Emulsion Batches:

4m 68° 098-02..15093-07095

8m 68° II-a-E..105-18085

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49418F	FOCUS TEST		COMPARISON / STELLAR					Fe Ne #3 WITH DIFFUSER	30-50
49418	HD 148483	16 25.4	+42° 06'	19:22	19:43	2h22W	+42°04	Fe Ne #3 WITH DIFFUSER	30-200
49419	HD 182917	19 21.9	+50°02	19 50	22:01	01h45W	+50°21	Fe Ne #3 WITH DIFFUSER	10-20
49419T	SPEC CALIB FOR	PLATES	49418, 19		15H,D@	①150 P3 FB10 ②7VD1 HA ③		7V D2 S450	
49420	HD 12929	02:01.5	+22°59	22:17	22:29	4 30E	+23°30'	Fe Ne #1 NO DIFFUSER	4-8
49421	HD 170200	18:23.1	+06°08	22:47	23:34	4 15W		Fe Ne #1 NO DIFFUSER	4-8
49422	HD 11886	01 44.9	+46°58	23:44	01:07	1 35E	+47 30	Fe Ne #1 NO DIFFUSER	4-8

Spectr. Temp. ..... Dome Temp./Hum. 11°C 61% Transparency Conditions 3\6...

Focus .....

Spectr. Temp. 52°F..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				B.C.	1200/40.5	B.S.	098-02	A		T=60°F F=508	OK
NO FILTER 5007	5	V= 5.04	M6III	B.C.	1200/40.5	B.S.	098-02	A	CH CYG STD	Em same Comp str/s stellar	OK
FILTER 5005	5+	V= 8.4	M7III	B.C.	1200/40.5	B.S.	098-02	A	CH CYG OBS PRG.	Em str Comp str Cont str	
							098-02				✓
FILTER 0169	5+	2.2	K3III-b	B.C.	1200/50.7	B.S.	IIa0-E	A	STD VEL	T=55°F F=508	strong comp wk
4500		5.7	B8III	B.C.	1200/50.7	B.S.	IIa0-E	A	2y PROG	comp wk	sl weak wk /is stellar
2854		7.1	B8	B.C.	1200/50.7	B.S.	IIa0-E	A	" "	cloud	sl weak comp wk

317 Thurs-Fri

Date Sept. 12-13/85 Observers LH-RI

Emulsion Batches: 4"x5" 098-02 15093-07095

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49423	HD182917	19 21.9	+50 02	19 32	21 18	1 05W	+50 21	FeNe #3 @ d. Maser	10;10
49423T	SPOT CAL FOR PLATES 49423-24				15H1D	15UD3 07 4810	UD1 37 H2 5450		
49424	HD207076	21 41.4	-2 40	21 25	22 22	0 11E	-2 07	FeNe #3 @ d. Maser	10-10-10
49424F	FOCUS TEST		COMPARISON / STELLAR					FeNe #3 @ DIFFUSER	40-40
		Pocket Spectrograph			22:30 - 05:05				

Spectr. Tem
Focus....
Spectr. Tem

Exp Mtr
50007
HG FILTER
50001

Spectr. Temp. +55°F ..... Dome Temp./Hum. +14°C/52% Transparency Conditions fine ..... 318...

Focus ....509.....

Spectr. Temp. +52°F ..... Dome Temp./Hum. 16°C/92%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
NO FILTER		V			1200/						comp str
50007	5	8.4	Mb	BC	/40.5	BS	098-02E	A	Obs Pgm	Emst	
							098-02				v
NO FILTER					1200/						comp str
50001		7.89	M7III	BC	/40.5	BS	098-02E	A	Obs Pgm	T=52°F F=571	fine
					1200/40.5	BS	098-02	A		T=52°F F=571	OK

319

Fri-Sat

Date Sept. 13:14/85 Observers BT-R.

Emulsion Batches:

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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
	RASC Tour								
		Pocket Spectrograph			23:47 - 05:06				

Spectr. Ten

Focus.....

Spectr. Ten

Exp Mtr.

Spectr. Temp. ..... Dome Temp./Hum. 10°C/90% Transparency Conditions fine 320

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. 8°C/97%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality

321

Test-Series

Date Sept. 14-15/83 Observers KH-KI

Emulsion Batches:
4m 69.098-02 15.093-0709.5

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
9425	CH CYG HD 182917	19 21.9	+50° 02	19 35	20 35	0 33W	+50 23	Fe Ne #3 W	10-10
9426E	HD 207076	21 44	-2 40	20 44	21 33 ⊙15V D3	0 54E ②70D1	-2 07 ③70, D2	Fe Ne #3 W	10-10
9426T	SPOT CAL FOR PLATES 9425,26			13 MIN	4910	HA	5450		
9426F	FOCUS TEST	COMPAR/STELLAR						Fe Ne #3 W DIFFUSER	40-40
		Pocket Spectrograph		21.45	- 05:30				

Spectr. Ten
Focus
Spectr. Ten
Exp. Mtr
50013

Spectr. Temp. 62°F Dome Temp./Hum. [illegible] Transparency Conditions 322

Focus 507

Spectr. Temp. [illegible] Dome Temp./Hum. 9°C / 82%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
50 FILTER		1									
50002	3"	54	Mb	B.C.	1200/40.5	B.S.	098-02E	A	[illegible]		fine
50 FILTER											
50013	3	759	Mb	"	"	"	"	A	[illegible]		fine
							098-02E			one ridge light streak ok ✓	
				B.C.	1200/40.5	B.S.	098-02E	A		9 = 60°F F = 507	ok

323

Emulsion Batches:

Date SEPT 15-16/85 SUN-MON Observers K.Y.-R.

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
	POCKET SPECTROGRAPH			19:35	05:20				

Spectr. Tem
Focus
Spectr. Tem
Exp. Mtr.

Spectr. Temp. ..... Dome Temp./Hum. 4°C / 52% Transparency Conditions ..... 324...

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. 12°C / 93%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality

325 Mon-Tues

Date Sept. 16-17/85 Observers BH-RI

8m 68° Emulsion Batches: IIaO-E 1D5-11095 ... 098-02 1509-07025 ...

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Exp
49427	HD190390	19 59.6	-11 53	19 07	23 19	2 41 W	-11 34	NO COMP with #1	1-1
49427T	SPOT CAL FOR PLATES 49427				15 MIN @ 15 VOLTS	① D4 3900	② D3 4300	③ D2 4810	
49428	HD182917	19 21.9	+50 02	23 31	01:28	5" 31 W	+50 22	Fe Ne #3 di. Fuser	10-10
49428T	SPOT CAL FOR PLATE 49428				15 MIN @	① 15V D3 4300	② 7V D1 Hd	③ 7V D2 5450	
49428F	FOCUS TEST		COMPARISON / STELLAR					Fe Ne #3 di. Fuser	40-40
49429	HD8890	1 22.6	+88 46	02 03	02 10	0 58E	+89 17	Fe Ne #1 di. Fuser	8-8
49430	"	"	"	02 14	02 20	0 47E	"	"	8-8
49430F	FOCUS TEST		COMPARISON / STELLAR					Fe Ne #1 NO FILTER	20-20

Spectr. Temp. ...63°F..... Dome Temp./Hum. 16°C/52% Transparency Conditions ..poor.....326..

Focus .....50.6.....

Spectr. Temp. ..... Dome Temp./Hum. 11°C/98%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
UE FILTER					1200/	150μ/					
0423	1"-2"	6.86	F.III	BC	50.7	1.0	IIaO-E	A	Fe/rG Pgm	cirrus for last ½ of exp (stopped by cloud)	good
							IIaO-E				✓
V FILTER		V			1200/						
5008	3"	8.4	M6	BC	405	B5	098-02E	A	Obs Pgm	T=60F F=508	OK
							098-02				
							098-02	A		TELESCOPE LIMIT T=58 , F=508	OK
0026		2	F	BC	1200/ 507	B5	IIaO-E	A	KK Asm Sp	T=58 F=507	fair
0006		"	"	"	"	"	"	A	KK Asm Sp		
				"	"	"	"	"		T=59½°F F=507	ok
						CLOSED UP	90%	HUMID	DOME	DRIPPING WET	
						AND END	OF	TUBE	DAMP		

327 Fil-Set

Date Sept. 20-21, 25 Observers Kh-Ta-Mk-Kwi

Emulsion Batches:
IIa-J-K
.....
.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
19431	HD137709	15 23.7	+29 27	19 24	20 22	4 36W	+ —	Fog #1	10-10
Entry	Sept 24/25	- VCR Recordings -		#1 - V faint star ~ 5' NW of Ring Nebula					
#2	Ring Nebula - (not visible obviously) -			#2 sec → 2	40/60	3 secs too saturated			
#3	M15 (Looks OK) · 2 1/3 sec								
Rejection	~~HD 163992~~			20 48	21 08	—	—	#1 Fine	1 sec

Spectr. Temp. 75°F Dome Temp./Hum. 73°F / 55% Transparency Conditions hazy 328

Focus 503

Spectr. Temp. / Dome Temp./Hum. /

note 15 sec @ 4500 Å, f/4.5 FL

Comparison Type/Filter	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
	2 filter 2200	3"	3.93	Top	BC	120/5.7	85	IIa-E	A	[illegible] Sp	Exp 04 no comp	
	T (Dome) = 60°F & H = 65% at beginning of night.									—	KK + Tu	
	filter											
#1 filte				Retic	Retic	1200/5.7	250/3					

[illegible]

329 Fri-Sat

Date Sept 27-28. 1985 Observers Fla.-Ja.-...tt...

Emulsion Batches:

Dewar topped at 19:45, 00:20.

T.=-149.9°C

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
49432	28 Cyg HD 191610	20 089	+36 48	21 29	22 08	W		D Fe Ar	8
	25 Cyg	"	"	22 20	23 06	W		"	"
	28 Cyg	"	"	23 16	00 04	W		"	"
	ξ Per HD 24912	3h 58m.0	+35 45	00:43	01:11			D Fe-Ar	6
	ξ Per	3 47 51	+31 35	01:29	02:00	148E		"	"
	ξ Per HD 24398	3h 51m.7	+31 50	02:13	02:25	E		"	"
	FLAT - 5 sec								
	ξ Per	3h 58m.0	+35° 40'	02:45	03:15	033E	+35 54	Diffuser Fe-Ar	6.5
	ξ Per	"	"	03:22	4:03			"	"
	FLAT FLDS								
	Data in SEPT2785A.DAT (up to number) ; concatenated to SEPT2785.DAT								
	SEPT2785B.DAT (after number)					Fln Col 2/85			

Spectr. Temp. ..... Dome Temp./Hum. 163F / 65% Transparency Conditions . Fine 330

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. ..... / .....

Rg Tour location of Jupiter

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
30,076	5"	4.8	135°E	Reticon	1800/43.2°	250μ			Fln - Bet ☆	+2 Flat Flds (10 sec)	
2:,050		"	"	"	" / "	"			Fln - Bet ☆		
3:,150		"	"	"	" / "	"			Fln - Bet ☆	2 Flat Flds. (10 sec)	
35,911		4.04	C7-II	"	1800/50.3	"	NOTE: header info. on Fln says tilt = 51.3 incorrect		Fln 0 Star	2 Flat Flds (3 and 5 sec)	
40,890		"	"	"	" / "	"			Fln 0 Star	Bombed twice after hitting "4" in data entry during integration	
45,115		2.8	R11b	"	" / "	"			Tedious, STD for 3 Fln		
				-	1800/50.3	"					
42,987		4.9	C7-II	"	1800/51.0	"			Fln 0 Star	2 Flat Flds. (5 and 5 sec)	
9,343		"	"	"	" / "	"			"	CLOUD!	
					" / "					5 sec x 2 ; 3 sec x 2	

331

Emulsion Batches:

Date Sept. 29-30, 1965 Observers Fle-Jm
Sunday - Monday "The Keyboard is the Universe"

Plate No.	Object	R.A. 1965 ~~1900~~	Declination 1965 ~~1900~~	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
	FLAT FIELD								
	FLAT FIELD								
	Comp Fe-Ar							Diffuse Fe-Ar	90s
49433	25 Cygni	20h 08m.9	+36° 48'	20:47	20:46	0 52W			
	Comp Fe-Ar							Diffuse Fe-Ar	~60
	28 Cyg	20h 08m.9	+36° 48'	21:51	22 59	3 03W			
	Comp Fe-Ar	26 units = 14						Diffuse Fe-Ar	~70
	28 Cyg	20 08.9	+36 48	23 04	00 02	4 06W			
	Comp Fe-Ar	19 units = 15							70
	Flat Field								
	Flat Field								
	Dark								
	Dark								

Spectr. Temp. ..... Dome Temp./Hum. 76°F/55% Transparency Conditions . Fine 332

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. ...../.....

Note— we had to use VT100 "A" which prevented use of graphics

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				Reticon	1800/43.2	250μ				15 sec	
				"	" / "	"				10 sec	
				"	" / "	"				95 sec	
A0005	1-2"	4.8	B/Tc	"	" / "	"			Be-Fln		
				"	" / "	"				~60 sec	
A0005	2-3"	4.8	B2Tc	"	" / "	"			Be-Fln		
				"	"	"			Record 2x the exposure		
A3600	2-3"	4.8	B2.5Tc	"	"	"			Be-Fln	grating foggy	
				"	"	"					
				"	"	"				15 sec	
				"	"	"				10 sec	
				"	" / "	"				1 min	
				"	" / "	"				2 min	

333 #2

Emulsion Batches: .....

Date Oct. 2/3, 1985 Observers Fin-Ri .....

Wis-Tuc

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
	FLAT FIELD							TUNG	15SEC
	FLAT FIELD							TUNG	15SEC
	FLAT FIELD							TUNG	10SEC
	FLATFIELD							TUNG	12SEC
	COMPARISON							FE AR#2 DIFFUSER	100 SEC
49434	HD 191610	20 5.7	+36 33	1905	19:55		+36°56		
	HD 191610	20 5.7	+36°33	19:57	20:05		+36°56		
	HD 191610	20 5.7	+36 33	20:07	20.48	01 *09W	+36°56		
	HD 191610	20 5.7	+36 33	20.51	21:31	02 4 5W	+36°56	FE AR#2 DIFFUSER	100 SEC
	HD 191610	20 5.7	+36 33	21.38	22:20	02 4 W	+36°56	"	3MIN
	HD 191610	20 5.7	+36 33	22.31	23:09	03 30 W	+36°56	"	3MIN
	HD 191610	20 5.7	+36 33	23:19	00:02	04 24 W	+36°56	FE AR#2 DIFFUSER	3MIN
	13 SEC FLATFIELD	2X						TUNG	
	FLAT FIELD	5 SEC 2X	5 SEC 2X					TUNG	
	HD 24912	03 52.5	+35°30	01:01	01:25	E	+35°52	FE NE#3 DIFFUSER	80 SEC

Spectr. Temp. ..... Dome Temp./Hum. 11°C / H=53% Transparency Conditions ... Good 334

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. .....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				RETICON	1200/43.2	250μ/.3		-49.8	FLn -Be*	15SEC	4313
				RETICON	1800/43.2	250μ/.3		"	FLn-Be*	15SEC	4377
				RETICON	1800/43.2	250μ/.3		"	FLn - Be*	10SEC	2452
				RETICON	1800/43.2	250μ/.3		"	FLn - Be*	12SEC	2775
				RETICON	1800/43.2	250μ/.3		"	FLn - Be*		62
BLUE FILTER 38000		4.82	B3Je	RETICON	1800/43.2	250μ/.3		"	FLn - Be*		FIXED (C) 3171
8,500		4.82	B3Je	RETICON	1800/43.2	250μ/.3			FLn - Be*	ADJUSTED GRATING +TILT A LITTLE	864 (3)
40019		4.82	B3Ve	RETICON	1800/43.1	250μ/.3			FLn - Be*		3293 (1)
40026		4.82	B3Ve	RETICON	1800/43.1	250μ/.3			FLn - Be*	COMP 20	3281 (9)
40009		4.82	B3Ve	RETICON	1800/43.1	250/.3			FLn - Be*	COMP 38	3267 (4.5)
40019	3	4.89	B3Je	RETICON	1800/43.1	250μ/.3		-49.8°C	FLn -Be*	TOPPED UP DEWAR (38)	3258 (4)
45018		4.89	B3Je	RETICON	1800/43.1	250μ/.3		-49.8°C	FLn-Be*	(38)	3847
					1800/43.1	250μ/.3			FLn-Be*		3395
					1800/51.0	250μ/.3		-49.8°C	FLn - OSTAR	5SEC 3SEC 6404 2039 5445 2744	
40050		4.04	07.5III	RETICON	1800/51.0	250μ/.3		-49.8°C	FLn - OSTAR		(3) 3220

335 #2

Emulsion Batches: .....

Date WED-THURS OCT 2/3/85 Observers ... FLA-RI ....

.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
	HD 24912	03 52.5	+35 30	01:32	01:50	1h 36m E	+35°52	FeNe #3 DIFFUSER	80 SEC
	HD 24398	03 47.9	+31° 35	02:07	02:17	1h 05m E		FeNe #3 DIFFUSER	80 SEC
	HD 24912	03 52.5	+35° 30	02:30	02:52	0h 35 E	+35° 52	FeNe #3 DIFFUSER	80 SEC
	HD 24912	03 52.5	+35° 30	02:59	03:19	0h 09 E	+35° 52	FeNe #3 DIFFUSER	80 SEC
	HD 24398	03 47.9	+31° 35	03:32	03:40	0h 16 W	+31° 57'	FeNe #3 DIFFUSER	80 SEC
	HD 24912	03 52.5	+35° 30	03:53	04:15	0h 48 W	+35° 52'	FeNe #3 DIFFUSER	80 SEC
	HD 24912	03 52.5	+35° 30	04:22	04:42	W	+35° 52'	FeNe #3 DIFFUSER	80 SEC
	HD 24912	03 52.5	+35° 30	04:45	05:04	01h 37 W	+35° 52'	FeNe #3 DIFFUSER	80 SEC
	HD 24398	03 47.9	+31° 35	05:19	05:27	02h 05 W	+31° 57	FeNe #3 DIFFUSER	80 SEC
	HD 24912	03 52.5	+35° 30	05:39	05:55	02h 28 W	+35° 52	FeNe #3 DIFFUSER	80 SEC
	FLAT FIELDS							TUNG	4 SEC x

Spectr. Ter
Focus.....
Spectr. Ter

Exp Mtr.

Spectr. Temp. ..... Dome Temp./Hum. ..... Transparency Conditions .... Good ..... 336...

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. T=7°C; H=52%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
30,000	3	4.04	07.5III	RETICON	1800/51.0	350μ/.3		-149.8	FLN-OSTAR		2388
45,079		2.96	B1Ib	RETICON	1800/51.0	250μ/.3		-149.8	FLN-OSTAR	STD	4004
45045		4.04	07.5III	RETICON	1800/51.0	250μ/.3			FLN-O STAR	TOPPER RETICON DEWAR	3507
45050		4.04	07.5III	RETICON	1800/51.0	250μ/.3			FLN-OSTAR		3564
45059		2.96	B1Ib	RETICON	1800/51.0	250μ/.3			FLN-OSTAR	STD	4081
50034		4.04	07.5III	RETICON	1800/51.0	250/.3			FLN-O STAR		3921
50153		4.04	07.5III	RETICON	1800/51.0	250μ/.3		-149.9	FLN-OSTAR	LOST DATA DUE TO READ FRAMING ERROR	
50034		4.04	07.5III	RETICON	1800/51.0	250μ/.3		-149.9	FLN-OSTAR		3903
45142		2.96	B1Ib	RETICON	1800/51.0	250μ/.3		-149.9	FLN-OSTAR	STD	3527
50050		4.04	07.5III	RETICON	1800/51.0	250μ/.3		-149.9	FLN-O STAR		3197
				RETICON	1800/51.0	250μ/.3		-149.9			4643
											4314

337 Thurs-Fri

Date Oct. 3-4/55 Observers BH-RI

Emulsion Batches: 4" 62° 09L-02.15093-.17095

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49435F	Focus Test			COMPARISON / STELLAR				FeNe #3 w/ diffuser	14-14
49435	HD182917	19 21.9	+50 02	18 31	20 16	1 25W	+50 18	FeNe #3 w/ diffuser	4-4-4
49435T	SPOT PLATE FOR	49435-38			15MIN	① ISUD3 ② HVD1 ③ 4810 H2		① VD2 ② 5450	
49436	HD182917	19 21.9	+50 02	20 20	23 12	4 22W	+50 18	FeNe #3 w/ diffuser	4-4-4
49437	HD182917	19 21.9	+50 02	23 16	00 08	5 17W	+50 18	FeNe #3 w/ diffuser	4-8
49438	HD207076	21 41.4	-2 40	00 16	00 38	3 28W	-2 11	FeNe #3 w/ diffuser	
		Pocket Spectograph			01:00 - 03:45		cloud at end		

Spectr. Ter
Focus....
Spectr. Ter
Exp. Mtr.
NO FILTER 50004
NO FILTER 50004
NO FILTER 10987
NO FILTER 5320

Spectr. Temp. ..... Dome Temp./Hum. 12.°C/81.% Transparency Conditions intermittent cloud 338

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. 8.°C/97.%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
				B.C.	1200 /40.5	B.S.	098-02E	A		T=56°F F=50%	OK
10 FILTER 50004	3"-4"	V 8.4	Mb	BC	1200 /40.5	BS	098-02E 098-02E	A	Obs Pgm	plate broken - 5 easy pieces no TV guiding	
10 FILTER 50004	3"	V 8.4	Mb	BC	1200 /40.5	BS	098-02E	A	Obs Pgm		OK
10 FILTER 10987		V 8.4	Mb	BC	1200 /40.5	BS	098-02E	A	Obs Pgm	telescope oscillating at end T=52°F F=509.5	Slwl
10 FILTER 5320		7.89	Mb III	BC	1200 /40.5	BS	098-02E	A	Obs Pgm		V wk

339 Fri. Sat

Date Oct 11-12 1985 Observers BH-Tm

Emulsion Batches:
8" 68° A a.O-E -11095
4" 68° 098-02 5033-17095

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
49439F	Focus Test							Fe Ne #1 no diffuser	15-15
49439	HD186791	19 41.5	+10° 22	18 39	18 50	X 0 09 E	+10 42	FeNe #1 no diffuser	7-7
49440	HD190390	19 59.6	-11 53	19 03	22 01	3 02 W	-11 28	FeNe #3 diffuser	2-2-2
49440T	Spot Calib Fr 49440-45				15 mi @	15V D3 4910	TV D1 14α	TV D2 54-0	
49441	HD432	0 03.8	+58 36	22 08	22 11	0 52 E	+59 08	FeNe #3 diffuser	3-3
49442	HD13174	2 03.7	+25 28	22 23	22 55	2 08 E	+26 00	FeNe #3 diffuser	2-2-2
49443	HD17584	2 44.3	+37 54	22 59	23 16	2 29 E	+38 24	FeNe #3 diffuser	3-3
49444	HD21770	3 25.5	+45 43	23 26	00 03	2 22 E	+46 08	FeNe #3 diffuser	2-2-2
49445	HD20902	3 17.3	+49 30	00 08	00 10	2 08 E	+49 56	FeNe #3 diffuser	3-3
49446	HD432	0 03.8	+58 36	00 26	00 30	1 26 W	+59 10	FeNe #3 diffuser	3-3
49447	HD13174	2 03.7	+25 28	00 36	01 19	0 16 W	+26 00	FeNe #3 diffuser	3-3
49448	HD17584	2 44.3	+37 54	01 24	01 45	0 01 W	+38 23	FeNe #3 diffuser	3 3
49448T	Spot Calib	For 49446 -48 + 49439			15 mi @	15V 119	D1 +10	D2 +10	
	02:13 Located and observed P/Halley (1982i)						+2037		

Spectr. Temp. ...52°F..... Dome Temp./Hum. 51°F/56% Transparency Conditions ...Fine...hazy..... 340

Focus .....5.09.....

Spectr. Temp. ...45°F..... Dome Temp./Hum. .....

Comparison Type Filter Exp	Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
					BC	1200/50.7	BS	IIaO-E	A			discarded nothing
Fe/Ne*3	BLUE FILTER 6607	3"	4.1	K3II	BC	1200/50.7	BS	IIaO-E	A	Std Vel		NO COMP
Fe/Ne*3	NO FILTER 46000	3"-4"	6.86	F1III	BC	1200/40.5	150μ/1.0	098-02E	A	Fe/rG Pgm	Note "No Filter" replaced by blank in log	
								098-02				
Fe/Ne*3	NO FILTER 12772	2"	3.6	F2III-IV	BC	1200/40.5	150μ/1.0	098-02E	A	Fe/rG Pgm		
Fe/Ne*3	NO FILTER 46005	2"	5.31	F2III	BC	1200/40.5	150μ/1.0	098-02E	A	Fe/rG Pgm		
Fe/Ne*3	NO FILTER 17208		4.57	F2III	BC	1200/40.5	150μ/1.0	098-02E	A	Fe/rG Pgm		
Fe/Ne*3	NO FILTER 47155	2"	5.71	F4III	BC	1200/40.5	150μ/1.0	098-02E	A	Fe/rG Pgm		
Fe/Ne*3	NO FILTER 14373		2.27	F5Ib	BC	1200/40.5	150μ/1.0	098-02E	A	Fe/rG Pgm		
Fe/Ne*3	BLUE FILTER 10059		2.61	F2III-IV	BC	1200/50.7	150μ/1.0	IIaO-E	A	Fe/rG Pgm	Sol 5:10 T 47°	
Fe/Ne*3	BLUE FILTER 12270		5.31	F2III	BC	1200/50.7	150μ/1.0	IIaO-E	A	Fe/rG Pgm		
Fe/Ne*3	BLUE FILTER 12042		4.57	F2III	BC	1200/50.7	150μ/1.0	IIaO-E	A	Fe/rG Pgm	* Actually 11 on com calibrate	
								IIaO-E			Inc Fe/Ne on West 40	
											Exp 5 of Cal Comp in from Lake	
Hg	Hg	N/A			06 06.2		(Used a Small Slit, apparently symmetric)					

341

Tues-Wed

Date Oct. 15-16, 1985 Observers K.K.-T.A.

Emulsion Batches:

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp
4944	HD 159561	17 30.3	+12 38	18 53	18 57	W		FeNe #3 diffuser	2-2
	"	"	"	19 04	19 08			"	"
	Tryed unsuccessfully to find Comet Huntley-Good (1985)					not where	1114 coord.	Yes indicated	
	HD 182640	19 20.5	+2 55	20 01	20 31			FeNe #3 diff	2-2
	Flat Fields	3	1.5 sec	FeNe #3 u diffuser					
	Darks	2 min							

Spectr. Temp. ..... Dome Temp./Hum. t...../..65.2 Transparency Conditions ...go. thing. cloudy.....342

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. ...../.....

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
H. Hilter											
2210	2-3	2.2	ASTII	Reticon	1200/4.25	250/13		-157.8	Asm Sp tk		4750
2660											4460
Regulus in area											
2205	4-6	3.68	FOT	Reticon	1200/4.25	250/13		-158	Asm Sp tk	cloudy	2205

343

Date 1985 Oct 16-17 Observers KK-Tn

Emulsion Batches:
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.....
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Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
	Of Hartley-Gaud	20 27.5 (1950)	−9 43	21:31	22:01			FeA	30s
	NGC 7662	23 25.0 (1950)	+42 25	22:33	22:36			~~FeNe~~	~~2s~~
	NGC 7662	"	"	22:37	22:47			FeNe	20s
	Flat	5s (two Ramy)							
		1s							

Spectr. Temp. ..... Dome Temp./Hum. ~~40°F~~ K07 Transparency Conditions 344

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. 37° /95%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
Ø		7.7		BC	1800/47.2	25μ/∞	RETICON		-157.6°	can see in viewing eyepiece but not on slit	DATA LOST
30				BC	1800/46.0	25μ/∞	RETICON			TV on with IT eyepiece but not else	"
148									-157.4		"
				μ Nova	Disk Ø	dead					
				PDP-11 does not execute Dump ever - apparently							

345

Sat - Sun

Date Oct 19-20 1985 Observers T.H

Emulsion Batches: IIa-O E 11095

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49450	HD 186791	19 41.5	+10 22	18 48	19 15	1 05 W	+10 13	FeNe #1 w outcliff	10-10
49451	HD 204867	21 26.3	-6 01	20 20	20 33	0 39 W	-5 30	FeNe #1 w outcliff	10-10
49452	HD 222368	23 348	+5 05	20 42	21 06	0 58 E	+5 41	"	10-10
49453	HD 9138	1 249	+5 38	21 12	22 32	1 19 E	+6 13	"	10-10
49453F1	Focus Yes'					1 hr	"	"	
49453F2	" "					1 hr	"	"	
	88 γ Peg			22 55	23 00			FeNe #1 w/o d.c.	10 10

Spectr. Ten
Focus
Spectr. Ten

Exp Mtr.

Spectr. Temp. +57°F ..... Dome Temp./Hum. 35°F / 52% Transparency Conditions . semi. c. hazy ..... 346.

Focus ..... 507 .....

Spectr. Temp. ...53°F..... Dome Temp./Hum. +48°F / 98%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
B filter											
*	3-4	4:1	K3II	BC	1200/50.7	BS	IIaO-E	A	stdvel	Someone had turned off Exp meter in warm room	
	note, ~~4 min blank~~ ~~BComp~~ may ~~be~~ there due to faulty mirror movement.										
8745	3"	3.7	G0Ib	BC	1200/50.7	BS	IIaO-E	A	stdvel	Mirror movement restored	Comp str fine
7073	"	4.6	F7V	"	"	"	"	A	"		Comp str fine
7571	3-5"	5:1	K4III	"	"	"	"	A	"	cloud cyrrus	Comp str fine
				"	"	"	IIIaJ-E	A	T=53°F	set 507	OK
				"	K20/42°	"	"	A	"	" "	continue
									note IIIaJ used are those on which ~~the~~ ones of 2 hour exposures		
7315				BC	K20/42	BS	IIaO-E	A	Labeled B, no! Logged kk (Error corrected in log)		Comp str
									Too cloudy for a stdvel		

Comparison Type/Filter Ex

347 Sun-Mon

Date Oct. 20-21/85. Observers BL-Tu

5m 68° Emulsion Batches: 098-02E 09085-18105
IIaD-E 20105

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49454	HD190390	19 59.6	-11 53	17 59	20 20	1 57 W	-11 29	FeNe #3 diffuser	2-2
49454T	Spot Calib for 49454				15min@	15VD3 4810	7VD1 Hα	7VD2 5450	
49455	P/Halley (1982i)	current epoch 5 56.4	+21 11	01 54	05 30	1 20 W		FeA #2 diffuser	15-15
XX	Note - image intensifier lens came off in my hand: doesn't seem to screw back in. I had to hold it up in place each time I looked. It worked well anyway. Is the unit focusable? I had to focus by looking at screen & running up camera tube to focus point.								
49455T	Spot Calib for 49455				15min@13V	D4 3900	D3 4200	D2 4810	
49455F	Focus test							FeA #2 with Diff	15-1

Spectr. Temp. 50°F ..... Dome Temp./Hum. 44°F/58% Transparency Conditions cloud/clear for Halley!

Focus 509

Spectr. Temp. 43°F ..... Dome Temp./Hum. 40°F/65%

348

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
blank in O FILTER					1200	150μ					
17680	3"	6.86	F, III	BC	/40.5	/1.0	098-02E	A	Fe/rG Pgm		S/wk
							098-02E				v
5 FILTER					150	250μ					night stay only
2.d.a				BC	/23.5	/1.0	IIaO-E	A	Obs Pgm	F=518 T=46°F	
					at 3:45		Halley eclipses		a v faint star. Both visible with		
					image intensifier on		periscope. OK image with intensifier.				
				- Halley just barely visible in finder telescope.							
				- Only a round blob in visitor's eyepiece. No tail visible.							
				- Earlier eclipse at 5:30 with easier night than Halley							
							IIaO-E				v
				BC	150/23.5	250μ/1.0	IIaO	A		T=45°F F=518	OK

349 Mon - Tues

Date Oct. 21-22/85 Observers T.m

Emulsion Batches:
IIa.O-E 105 - 20105
old IIa.J-E - 15085

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49456F	Focus	test						F-No #1 mod. E	26-26
49456	HD 186791	19 41.5	+10 22	18 07	18 13	0 11 W	+	"	16-16
49457	HD 174237	18 14.5	+52 53	18 23	18 50	1 47 W	+5306	"	10-10
	WED Oct 23/85	Ri - 4ub							
	TRIED TO OBSERVE PUT INSIDE DOME OVER 100%								
	NO - PIERS DAMP								

Spectr. Temp. 51.5°F Dome Temp./Hum. 48°F / 55% Transparency Conditions Cloudy in from SE

Focus 509

Spectr. Temp. ..... Dome Temp./Hum. ..... / .....

350

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
No filter				RC	1200/50.7	BS	IIaS-E	A			fine
5C K 12 filter	2"	4.1	K3II	"	"	"	IIaO-E	A	stdvel		fine
1409	3"	582	B5e	"	"	"	"	A	Kub pgm	cloud	wk

351

Date FRI OCT 25 1985 Observers BT-RJ

Emulsion Batches:
IIIa-E 1D5-20105

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49458	HD 22484	03 31.8	+00° 05	01:16	02:34	0 55W	+00° 32	FeNe#1 WITHOUT DIFFUSER	8-[illegible]
49459	HD27524	4 15.6	+20 49	02 40	03:07	0 44W	+21 10	"	8-12
49459T	SPOT CAL FOR PLATES 49458-60				15 MIN @ 15 VOLTS	① D4 3900	② D3 4300	③ D2 4810	
49460	HD27397	4 14.3	+13 48	03 12	06 15	3 52W	+14 09	FeNe#3	8-8-4

Spectr. Te
Focus ....
Spectr. Te
Exp. Mtr.
PICTFIL
0.990
FILE FIL
2 4
FILE FILTER
8700

Spectr. Temp. ..... Dome Temp./Hum. 10°C/86% Transparency Conditions ..fine..... 352.

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. 8°C/91%

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
B" FILTER 6000	5"+	4.4	F8I	B.C	1200/30.7	B5	IIaO-E	A	STD VEL	9=58°F F=507	Fine
BLUE FILTER 214		6.77	F5V	"	"	"	"	A	Archive	9=56°F F=508	wK
							IIaO-E				V.
BLUE FILTER 8700	3"-4"	5.87	F0IV	BC	1200/30.7	B5	"	A	Archive	T=510F F=508	Str
										Note Comps too strong by at least ½	

353

Date Fri-Sat Oct 25-26/85 Observers ..KVL-RI.....

Emulsion Batches:
IIaD E 105-25105.....
IIIaJ Te # 29114 - 15085.
.....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Comparison Exp.
49461F	FOCUS TEST							Fe Ne #1 NO DIFFUSER	20-20
49461	HD 186791	19 41.5	+10° 22	17:45	18:10	00h24 W	+10° 43	Fe Ne #1 NO DIFFUSER	8-8-8
49462	HD 203467	21 17.3	+64°27	18:32	20:49	01h31W	+64° 42	Fe Ne #1 NO DIFFUSER	40-1/4
49463	HD 203467	21 17.3	+64° 27	20:55	23:42	04h24W	+64 42	Fe Ne #1 NO DIFFUSER	10-20-1
49463T	SPEC CALIB FOR PLATES 49462-63				SHUT @ D4	D 17.5V 3900	D 15V 4300	D 15V 4810	

Spectr. Temp. ..... Dome Temp./Hum. . 10°C . . 55% Transparency Conditions . . Good . . 4 2 1 4 . . Some . . . 354

Focus .....

Spectr. Temp. ..... Dome Temp./Hum. . . 7°C 86%

CLOUDS AFTER MIDNIGHT

Exp. Mtr.	Seeing	Ptg. Mag.	Sp.	Inst.	Grating/ Tilt	Slit	Emulsion	P.H.	Program	Remarks	Quality
							IIaO	A		T = 55°F F = 508	OK
B° FILTER 8900	3-4	4.1	K3II	B.C.	1200/50.7	B.S.	IIaO-E	A	STD VEL		comp top str str
30006	3-4	5.14	B3Ve	B.C.	1200/50.7	B.S.	IIIaJ+4	A	KUB PROG	TELE REVERSED	V str
24428	4-5	5.14	B3Ve	B.C.	1200/50.7	B.S.	IIIaJ+4	A	"	T = 53°F CLOUDS	V str
							IIIaJ+4				
										Comp top str on all plates	
										Cut by 1st half	

355 −13°C

Emulsion Batches: IIIaJ 01026

Date ..... Observers .....

Plate No.	Object	R.A. 1900	Declination 1900	Starting Time E.S.T.	Ending Time E.S.T.	Hour Angle End	Declination	Comparison Type/Filter	Ex
	HD 29316			19 19	2209	4 16 W	+53 39		1147
	HD 86360			22 19	0055	1 42 W	+12 41		1414
	HD 122742			01 03					

17754

43769

Se + 518 T = +13°F

77754

43769

Dad - 531-7959